

INDEX OF AUTHORS

ABSTRACTS A and B, 1935

An asterisk denotes a previous abstract. Patents are marked (P.).

Anonymous, Bunsen burner, A., 59. Chemical linking, A., 150. Crystalline principles from Indian species of *Artemisia*, A., 268. Nutritive value of locusts, A., 391. Treatment of cast iron with sodium carbonate, B., 26. Electric tube furnace, especially for determination of carbon in iron, B., 29. Chlorinated rubber and its application for textile purposes, B., 34. Constructional materials for food processing, B., 44. "Safe" colours for cotton and viscose, B., 59. Cacao-shell vitamin content, B., 77. Removable protected-bottom strainer, B., 82. Hex[an]one—a new ketone, B., 91. Film coverings as applied finishes, B., 109. Applied finishes for preservation of wood for tropical use, B., 109. Rational selection of pigmented cellulose lacquers and enamels, B., 109. Oil distillation from coal; Cannock wet-charge system, B., 131. Alloy-iron castings, B., 151. Uses of aluminium paint, B., 160. Jam manufacture, B., 172. Refining of motor benzol and similar fuels; Instill process, B., 179. Oxy-acetylene welding of steel tubes, B., 190. Continuous diffusion process [for sugar-beet cosettes]; the Bergé system, B., 200. Regeneration of carbonation scums in cane-sugar factories, B., 201. Properties and uses [in dyeing] of Calgon [sodium hexameta-phosphate], B., 224. Sodium aluminate in [water-works] filter-plant practice; double-coagulation process, B., 256. Reliability of laboratory results, B., 275. Insulation against heat losses, B., 289. Purification of coal, B., 291. Oilskins, B., 319. Filtration test for indicating quality of prelimed, limed, or carbonated beet juices, B., 328. Spoilage of wet beet pulp, B., 328. Separation of sugar dust from air, B., 329. *Shinia* (*Pistacia lentiscus*), B., 365. Sunflower seed from Cyprus, B., 365. Fastness of lake pigments to light, B., 366. Antioxidants and anti-skinning agents, B., 366. Petroleum jelly in printing inks [and varnishes], B., 366. Natural gas and its occurrence in the Nienhagen oilfield, B., 391. Rayon crêpe fabrics, B., 398. Solid carbon dioxide, B., 403. Comparison of wet and dry tensile strengths of artificial and natural fibres,

Anonymous—continued.

B., 445. Laminated plastics; synthetic resin-bonded fabric boards for electrical purposes, B., 466. Standard specification for creosote fuel oil for use in glass works, B., 484. Water-resistance of paper, B., 491. Specification for sands for making colourless glass, B., 496. British coals: their analyses and uses, B., 580. Importance to chemical industry of prohibited uses of metals, B., 595. Formation and deterioration of linseed oil films on normal exposure, B., 597. Seeds of *Strophanthus emini*, B., 606. Mordanting vegetable fibres and artificial silk, B., 625. Examination of finished silk and rayon materials, B., 670. Applications of zinc alloys, B., 678. Weights and volumes of slurry at various water contents and loss-on-ignition values, B., 726. Metals used in the oil industry, B., 729. Ageing of rubber by action of the atmosphere, B., 737. Uses of [organic] solvents in dyeing, printing, and finishing, B., 800. Improvement of cotton, B., 800. Drying [of clay], B., 803. Jelly testing, B., 826. British coals and their analyses, B., 834. Determination of water in alcohol-ketone mixtures, B., 839. Rayon dyes, B., 487. Zinc chromate. I. and II., B., 860, 913. Finishing of modern rayon crêpes, B., 897. Gas volumes per ton of clinker and gas velocities in rotary [cement] kilns, B., 903. Colloidal clay, B., 913. Amyl propionate as solvent for the lacquer industry, B., 913. Permeability to moisture of organic applied films, B., 914. Standard methods of sewage analysis, B., 927. Printing on metal-coated paper, B., 943. Modern electroplating, B., 955. Chemicals for printing inks, B., 960. Procedure in sampling and analysis of solid fuels in connexion with steam-boiler trials, B., 978. Transparent paper or film yarns, B., 986. Direct printing with indigosols on cotton piece goods, B., 989. Solvent recovery in the plastics and allied industries, B., 1036. Loss of weight in bleaching [cotton] knitted goods, B., 1041. Welding or cutting types of container which have held combustibles, B., 1050. History of the modern printing-ink mill, B., 1055.

Anonymous—continued.

Yeast from waste sulphite liquor, B., 1112. Mould-stains [on fibres] and their prevention, B., 1135. Dry spinning of viscose, B., 1136. Dyeing and finishing machinery, B., 1139. Is the use of the microscope advantageous in the paint and varnish industry? B., 1151. [Plant-nutrient value of ground raw phosphate rock]; field experiments, 1933, B., 1157.

A.

A.C. Spark Plug Co., [barium-nickel] alloys, (P.), B., 236.
Aalam, (Mlle.) T., and Martinet, J., triple linking, A., 432.
Aall, C. See Flusin, G.
Aamodt, O. S., and McCalla, A. G., quality and keeping properties of flour from wheat grown on black and grey soils of Alberta, B., 1160.
Aarnio, B., factors affecting the humus layer of natural soils, B., 1156.
Aas, J. M., Kreis reaction with unsaturated fatty oils, B., 364. Oxidation of unsaturated fatty oils by atmospheric oxygen, B., 640.
Abadie, P., and Champetier, G., dielectric properties of heavy water, A., 808.
See also Girard, P.
Abbassi, A. See Chambard, P.
Abbé, P. O., modern ball and pebble [mill] technique, B., 49.
Abbott, W. S., and Billings, S. C., inefficiency of *p*-dichlorobenzene, naphthalene, and cedar oils as repellents against clothes moths, B., 945.
Abbott Laboratories, [urecides] of therapeutic value, (P.), B., 878*.
See also Moore, M. B., Raiziss, G. W., and Volwiler, E. H.
Aberhalden, E., dependence of composition of proteins of blood-serum and -plasma on diet, A., 1261. Detection of defence enzymes in urine, A., 1268.
and **Bahn, A.**, synthesis of dipeptides with an amino-group in a serine residue, A., 1014.
and **Faust, W.**, action of crepsin and trypsin on polypeptides containing ψ -leucine, A., 1228.

- Abderhalden, E., Faust, W., and Haase, E., configurative behaviour of ψ -leucine in Walden inversion and elimination of halogen by dilute alkali from stereoisomeric α -bromo- $\beta\beta$ -dimethylbutyrylamino acids, A., 71.
- and Heyns, K., occurrence of hydroxyvaline as a constituent of proteins, A., 369.
- and Koelitz, E., action of pepsin-hydrochloric acid and trypsin-kinase on *l*-, *d*-, and *dl*-leucylalbumin; defence enzymes produced by injection of these substrates, A., 1279.
- and Siebel, H., dependence of composition of proteins of blood-serum and -plasma on diet, A., 1261.
- and Tietzer, E., behaviour of racemic amino-acids in the animal organism, A., 654. Determination of effect of ultra-violet light on proteins of skin and serum by means of the defence enzyme reaction, A., 1276.
- and Wertheimer, E., relation of the vitamin-B complex (particularly vitamin-B₁) to carbohydrate retention, A., 669.
- Abdullah, S. M., addition of compounds containing a reactive methylene group with phenyl vinyl ketone, A., 622. See also Mannich, C.
- Abe, K., mucous substance of "natto," a Japanese food. I. Alcohol-soluble nitrogenous compounds in mucous substance, B., 122.
- Abe, Shigehiro, absorption spectrum of α -substituted furan derivatives, A., 563.
- Abe, Sukichi, and Hara, R., thermal decomposition and heat of formation of sodium carbamate, A., 36.
- Shigetomi, S., and Hara, R., solubilities of certain salts in liquid ammonia. II. Solubility of sodium chloride in liquid ammonia and the saturated vapour pressure of the solution at low temperature, A., 818.
- Abe, T., variations in blood-gases after Röntgen irradiation of the spleen. I. Variations after irradiation of various regions of the body with small and large doses, A., 247.
- Abel, E., and Blumenkranz, L., oxidation of oxalic acid by iodic acid, A., 1334.
- Bratu, E., and Redlich, O., electrolytic dissociation of heavy water, A., 1076.
- and Hilferding, K., reactions between oxalic acid, iodine, and the iodate and iodide ions. II. Dark kinetics of iodine-oxalic acid reaction, A., 587.
- and Proisl, J. [with Schafranik, J., and Smrž, R.], mechanism of lead chamber reaction. I. Reaction between sulphurous and nitrous acids in a dilute system, B., 848.
- Redlich, O., and Stricks, W., iodine ion catalysis of deuterium peroxide, A., 939.
- and Schmid, H., intermediate product of long life between iodine and oxalate (ion), A., 1090.
- Abel, F. A. E., and Magistad, O. C., conversion of soil potash from non-replaceable into the replaceable form, B., 865.
- Magistad, O. C., Farden, C. A., and Louis, L., indirect methods for determining sugar in pine-apple juice, B., 1020.
- Abel, G., and Hess, K., fractionation of trimethylcellulose, A., 1356. See also Hess, K.
- Abele, W., circulating sulphite cooking liquor, B., 942.
- Abelin, I., origin of specific dynamic action, A., 113. Relationships between adrenal and thyroid, A., 410. Extrathyroidal origin of thyroxine-like active iodine compounds, A., 410. Efficacy of various thyroid preparations, A., 540. Antagonism between vitamin-A and thyroxine, A., 792. Effect of tyrosine on function of the thyroid gland, A., 1269.
- and Finkelstein, N. E., iodine metabolism and the thyroxine content of nodular goitres, A., 1009.
- Abelmann, L. E. See under Farb.- & Gerbstoffwerke C. Fleisch., jun.
- Abernethy, D., gelatinous product, (P.), B., 645. Rapid drying of gelatinous material, (P.), B., 864.
- Abildgaard, J. See Schou, S. A.
- Abkin, A., and Medvedev, S., structure of santonin and santonic acid, A., 755.
- Ablard, J. E. See Svirebely, W. J.
- Ablezova, K. S., and Roginski, S., new type of promoter, A., 830. Hydrogenation by adsorbed hydrogen atoms, A., 830. See also Bruns, B.
- Ablin, L. N. See Izrailson, Z. I.
- Ablov, A., influence of substituents in bases and anions on co-ordination index of a metal. VI. Additive products of benzylamine and phenylhydrazine with nickel salts of substituted acetic acids. VII. Influence of electric moment on the number of molecules of base fixed by a salt, A., 182, 1448.
- Abol, T., feeding of meat and bone meal to improve quality of lard obtained by use of rations containing large amounts of linseed cake, B., 972.
- Aborn, R. H. See U.S. Steel Corp.
- Abozin, F. G., determination of the degree of mercerisation, B., 989. See also Griboedov, D. N.
- Abraham, D., Magat, J., and Magat, M., spectrographic changes in blood of hens after injection of a lecithin-perhydryte complex, A., 526.
- Abramov, V. S. See Arbusov, B. A.
- Abrams, A., Anthony, P. L., Brabender, G. J., Graebner, W. H., and Marathon Paper Mills Co., laminated sheet material, (P.), B., 1139.
- Abrams, J. T., and Kipping, F. S., preparation of amino-alcohols. I., A., 209.
- Abrams, M. I., and Gilligan, D. R., carbohydrate metabolism in human hypothyroidism induced by total thyroidectomy. II. Blood-sugar response to insulin, A., 889. See also Gilligan, D. R.
- Abrams, V. R. See SulRo Corp. of America.
- Abramson, H. A., electric potential and charge of dissolved and adsorbed proteins, A., 30. Relation of potential and charge of bacteria to their agglutination, A., 408. Influence of salts on the potential and charge of inert and protein surfaces, A., 1075.
- and Daniel, J., influence of dielectric constant of medium on potential and charge of a protein surface in a liquid, A., 30. See also Wintersteiner, O.
- Abresch, K., rapid determination of alkalis [in soil analysis], B., 1059.
- Abzalom, W. J. See Distillation à Basse Temp. & Auto-Agglomération des Combustibles.
- Accardo, A. See Azzarello, E.
- Accles & Pollock, Ltd., and Holmes, L., brazing or soldering of metal articles, (P.), B., 556.
- Accumulatoren-Fabrik Akt.-Ges., electrodes for galvanic cells, particularly large-surface plates for lead electric accumulators, (P.), B., 415. Galvanic cells, particularly electric accumulators, (P.), B., 958.
- Achard, C., Bariéty, M., and Codounis, A., paradoxical hypolipemia in the dog after ingestion of butter, A., 523.
- Bariéty, M., and Gallais, P., influence of sodium caseinate on iron content of dog's spleen and liver, A., 644.
- and Boutaric, A., changes in blood-serum under the influence of heat, A., 1002.
- Boutaric, A., and Bouchard, J., action of sera on fluorescence of uranine solutions, A., 12. Comparison of effect of ordinary and *geno*-alkaloids on fluorescence of uranine solutions, A., 1446.
- and Pietre, M., proteins of liver, A., 376.
- Achard, (Mme.) G., viscosity of suspensions of blood-corpuscles at small concentrations, A., 640. Properties of suspensions of blood-corpuscles at various p_H values, A., 640.
- Acharya, B. G. S., and Wheeler, T. S., synthetic production of camphor from pinene, A., 496.
- Acharya, C. N., anaerobic decomposition of plant materials. I.—III. Rice straw (*Oryza sativa*). IV. Decomposition of plant substances of varying composition, A., 537, 664, 787; B., 746. Structure and oxidation of nitrogenous substances, A., 1516.
- Achenbach, H. See Schwarz, R.
- Achmatowicz, O., and Bochwic, B., strychnine and brucine; catalytic decomposition of quaternary brucine salts, A., 367.
- and Robinson, R., strychnine and brucine. XXXIV. Action of methyl sulphate on methoxymethylidihydro-neobrucidine and similar bases in boiling benzene solution, A., 1389.
- Achrap, L. K. See Voinilovitch, G. I.
- Achromeiko, A. I., action of farmyard manure and inorganic fertilisers, B., 37. Causes of negative action of fresh manure on crops, B., 37. Action exerted on crops by moist and dried manure, B., 37. Influence of carbon : nitrogen ratio on absorption of nitrogen by plants, B., 38. Availability [in soil] of iron and aluminium phosphates and their complex salts, B., 72, 778. Stability of soil structure, B., 243.
- Achumov, E. I., and Vasiliev, B. B., electrolysis of sodium chloride in liquid ammonia, A., 306, 1080. Calculation of the equilibrium in water at high temperatures, A., 448. See also Voinilovitch, G. I.
- Ackemann, M., secondary effect of cosmic rays, A., 679.
- Acker, J. T. See Standard Telephone & Cables.
- Ackerman, J. W. See Hodges, G. C.
- Ackermann, D., asterubin, a sulphur-containing guanidine compound of living organisms, A., 771. Synthesis of asterubin, A., 1004.
- and Heinsen, H. A., physiological action of asterubin and of other sulphur-containing derivatives of guanidine, A., 1265.

- Ackermann, D., and Müller, E., synthesis of asterubin, A., 1356.
- Ackerson, C. W. See Muschl, F. F.
- Ackert, J. E., resistance of chickens to parasitism, A., 384.
- Acklin, O., nitro-effect, A., 256.
- Ackroyd, A. See Williams (Hounslow), Ltd.
- Acqua, C., nature of ultra-viruses, A., 1420.
- Acree, F., jun. See Haller, H. I.
- Acree, S. F., capillary colloid mill, (P.), B., 833.
- Acreman, H. F. See Chloride Electrical Storage Co.
- Adadurov, I. E., rôle of rhodium in increasing resistance of platinum gauze, A., 941. Function of carriers in heterogeneous catalysis. V. Decomposition of formic acid on lead oxide deposited on birchwood charcoal, A., 1086. Chromium compounds as catalysts for sulphuric acid production, B., 268. Corrosion of lead, and the intensification of the chamber process, B., 722. Corrosive action of nitrosyl-sulphuric acid on lead, B., 722.
- Apanaseuko, M. V., Orlova, L. M., and Riabtschenkov, A. I., influence of composition and of packing of the contact mass on activity of chromium catalysts, B., 403.
- Budnikov, P. P., and Riabtschenkov, A. I., utilisation of waste products from aluminium chloride production as carriers for platinum in oxidation of sulphur dioxide to trioxide, B., 269.
- and Didenko, P. D., causes of increase in activity of platinum gauze in oxidation of ammonia, B., 402. Platinised copper gauze for oxidation of ammonia, B., 946. Effect of admixtures to ammonia-air mixtures on corrosion of platinum gauze, B., 1042.
- and Gernet, D. V., activation of chromium catalysts by barium oxide, A., 1209. Poisoning of chromium catalysts by arsenic and other catalyst poisons, A., 1209. Causes of diminution in activity of vanadium-barium catalysts, B., 723.
- Gernet, D. V., and Chitun, A. M., chromium contact catalysts for oxidation of sulphur dioxide, B., 268.
- and Kraini, P. Y., function of carriers in heterogeneous catalysis. IV. Dehydrogenation and hydrogenation of ethyl alcohol on zinc oxide deposited on charcoal, A., 1086.
- Adair, G. S., application of Gibbs' fundamental equation to protein systems, A., 300.
- and Adair, M. E., determination of electric charge of colloidal ions, A., 299.
- and Keys, A. B., micro-determination of base by electroanalysis, A., 52.
- Adair, M. E., and Taylor, G. L., crystallisation of human serum-albumin, A., 508.
- See also Adair, G. S.
- Adalijan, L. K., varnish drying oil from acid [petroleum] sludge, B., 1030.
- Adam, H. R. See Macdonald, F. G.
- Adam, N. K., surface chemistry, A., 1316.
- Askew, F. A., and Danielli, J. F., surface films of sterols and their derivatives, A., 974.
- Danielli, J. F., and Harding, J. B., structure of surface films. XXI. Surface potentials of dibasic esters, alcohols, aldoximes, and ketones, A., 161.
- Adam, N. K. See also Lintern, P. A.
- Adam, S. See Leulier, A.
- Adamanis, F. See Hrynakowski, K.
- Adamczewski, I., ionic mobilities in dielectric liquids, A., 148.
- Adamczka, J. See Malachowski, R.
- Adamoli, C., beryllium compounds from beryllium-bearing minerals, (P.), B., 494.
- Adams, A. H., coating of metallic wire with a viscous liquid like varnish, (P.), B., 684, 910.
- Adams, B. A., and Holmes, E. L., adsorptive properties of synthetic resins, B., 465.
- See also Sullivan, W. H.
- Adams, C. E. See Standard Oil Co.
- Adams, D., and Libbey-Owens-Ford Glass Co., annealing of sheet glass, (P.), B., 23.
- Adams, E., and Robbins, W. J., effect of dyes on yeast fermentation as influenced by pH, A., 785.
- Adams, E. Q., decomposition voltage of Grignard reagents in dry ether, A., 1515.
- Adams, E. W. See Standard Oil Co.
- Adams, Frederick W., removal of iron oxide from silica sands, B., 849.
- See also Rockware Glass Synd.
- Adams, Frederick Wildes, and Witham, G. S., jun., pulp digestion, (P.), B., 1139.
- Adams, G. F. See Gen. Elec. Co.
- Adams, J., Hall, M., and Bailey, W. F., zinc cobaltinitrite for detection of potassium, A., 1337.
- Adams, J. E. See Skinner, J. J.
- Adams, J. M., and Lewis, W., large single crystals of ice, A., 48.
- Adams, J. R., effect of roasting on solubility of alunite, B., 802.
- See also Madorsky, S. L.
- Adams, K., mixer, (P.), B., 1121.
- Adams, L. G. See Grabfield, G. P.
- Adams, M., Power, M. H., and Boothby, W. M., influence of glycine on excretion of creatine and creatinine, A., 1407.
- Adams, M. H. See Taylor, T. C.
- Adams, R. See Bartz, Q. R., Hanford, W. E., Li, C. C., Morris, R. C., and Patterson, W. J.
- Adams, R. S. See McLaughlin, G. D.
- Adams, W. C. See De Groote, M.
- Adams-Hydraulics, Ltd. See Hopwood, J.
- Adams & Westlake Co. See Warneke, C. J.
- Adamson, D. W., and Kenner, J., preparation of diazomethane and its homologues, A., 479.
- Adamson, N. E., technology of ship-bottom paints, B., 100, 319.
- Adamson, W. A. See Du Pont de Nemours & Co., E. I.
- Adamstone, F. B., possible relation of vitamin-E to unrestricted cell division, A., 130.
- Adamczewski, I. See Bialobrzewski, C.
- Adcock, F., apparatus for raising or lowering temperature of a laboratory furnace, A., 1339.
- Adderley, J. R. See Thomas, C. A. G.
- Addington, L. H. See Cunningham, O. C.
- Addink, C. C. J. See Penning, F. M.
- Addink, N. W. H., structure of monolayers of myristic acid, A., 29.
- Addison, C. C. See Gibby, C. W.
- Addleston, J. A. See Dobbins, J. T.
- Adel, A., Raman spectrum of gaseous carbon dioxide, A., 145.
- and Slipper, V. M., constitution of atmospheres of the giant planets, A., 143. Difference bands in spectra of the major planets, A., 800.
- Adel, A., Slipper, V. M., and Barker, E. F., absorption of sunlight by the earth's atmosphere in the remote infra-red, A., 806.
- Adelsberger, A. See Müller, Erich.
- Adelson, D. E., MacDowell, L. G., and Pollard, C. B., piperazine. VII. Pro-caine analogues. I., A., 1508.
- and Pollard, C. B., piperazine. IV. Reactions with derivatives of chloroacetic acid. V. Compounds from N-phenylpiperazine and derivatives of chloroacetic acid, A., 1133, 1253.
- See also Pollard, C. B.
- Aderer, J., [precious-metal] alloy, (P.), B., 999.
- Adickes, F., and Peckelhoff, P. P., existence of carbon monoxide acetals. II., A., 959.
- Adkins, H., Kuick, L. F., Farlow, M., and Wojcik, B., hydrogenation of derivatives of pyridine, A., 92.
- See also Beckham, L. J., Farlow, M., Fehland, P. R., Kuick, L. F., Sprague, J. M., Van Duzee, E. M., and Wojcik, B.
- Adler, E., nutritive value of locusts, B., 428.
- Adler, Erich, synthesis of hydroaromatic compounds with "angular" methyl groups. I., A., 983.
- and Michaelis, M., components of the dehydrogenase systems. VII. Lactic acid dehydrogenase of yeast, A., 1276.
- See also Euler, H. von.
- Adler, H., Gottlieb, H. B., and Victor Chem. Works, triaryl phosphates, (P.), B., 1085.
- and Victor Chem. Works, stable chlorine-containing compounds, (P.), B., 991.
- Adler, L., butter, (P.), B., 1116.
- Adler, M. See Walter, Georg.
- Adloff, K., internal corrosion of cast-iron waste-pipes, B., 1097.
- Adnot, (Mme.) J. See Guillaume, A.
- Adolph, E. A., oxygen tension and urine production in frogs, A., 1148. Effects of carbon dioxide on urine formation and glomerular blood-flow, A., 1148.
- Adolph, W. H., calcium in nutrition in China, A., 1409.
- and Cheng, F. W., biological value of mixed cereal proteins, A., 1405.
- and Tsui, Y. F., effect of steaming compared with baking on nutritive value of wheaten bread, B., 1019.
- See also Cheng, Y. C., Chou, T. P., Hsü, P. C., and Kao, H. C.
- Adriaanse, D. J., and Bohlken, S. F., influence of porous vertical chamber walls on gas yield and quality; upper and lower gas exhaustion, B., 789.
- Adriaens, L., "stony" concretions in the trunk of *Chlorophora excelsa*, Bth., A., 266.
- Adriano, F. T., and Tabije, D. P., relative efficiencies of different storage solutions for preservation of the natural colour in Philippine plant material for exhibition purposes, B., 472.
- Valenzuela, A., Yonzon, E. C., and Ramos, C. C., handling of Philippine fruits with special reference to the ethylene, borax, and paraffin treatment, B., 250.
- Adrianov, K. A. See Maxorov, B. V.
- Adrianov, P. I., formation and stability of soil structure, A., 61.
- Asuma, N., concentration of milling soap, B., 1149.

- Advance Engineering Corporation. See Bixler, A. P.
- Aerovox Corporation. See Georgiev, A.
- Aeschlimann, J. A., synthesis of new medicinal alkaloids, A., 573.
- Afanasyev, N. N. A., and Sorokivski, F. E., structure of welds in malleable iron and grey iron, B., 498.
- Afferni, E., amino-acids in beet molasses and velocity of crystallisation, B., 75.
- Afzelius, I. See Hedvall, J. A.
- Agadzhanian, G., influence of natural conditions and of differences in strain on chemical composition of Armenian wheat, B., 42.
- Agafonov, N. N. See Tschufarov, G. I.
- Agafonov, V., colloidal portion of French soils, B., 565.
- Agaletzkaja, A. See Leites, S.
- Agaletski, F., and Zaikov, S., dephosphorisation of Bessemer steel with liquid slags, B., 676.
- Agar, W. M., thermally metamorphosed diorite near Brookfield, Connecticut, A., 60.
- Agarbieanu, I. I., Zeeman effect and magnetic quenching of fluorescence of S_2 and Te_2 , A., 1. Fluorescence and absorption spectrum of I_2 vapour, A., 2. Magnetic weakening of fluorescence of Te_2 and S_2 , A., 423.
- Agarwal, R. R., and Dutt, S., roots of *Citrullus colocynthis*, Schrader, A., 420. Chemical examination of *Cuscuta reflexa*, Roxb. I. Constituents. II. Constitution of cuscatalin, A., 1432, 1550.
- Agate, F. J., jun., and Zwemer, R. L., factors affecting adrenal insufficiency in the rat, A., 1173.
- Agde, G., and Vetter, K. E., conversion of dissolved sodium chromate into dichromate by carbon dioxide under pressure, A., 452.
- Agduhr, E., ergosterol increases prolific capacity of animals, and normal sexual functions intensify their resisting power against toxicity of ergosterol, A., 547. Units of measurement in morphological technique, A., 798.
- Ageev, N. V., and Shoyket, D. N., phase diagram of alloys of silver with aluminium, for the range 0—10% of aluminium, A., 576. Molecular solid solutions in the system copper-gold, A., 816.
- See also Kurnakov, N. S.
- Ageeva, A. V. See Kurnakov, N. S.
- Agia Anso Corporation. See Schmidt, Richard.
- Agner, K., reversible hydrolysis of liver-catalase, A., 1278.
- Agnew, A. M., and Chadeloid Chem. Co., coated fabric, (P.), B., 1091.
- Agnew, M. C., Agnew, R. G., and Tisdall, F. F., production and prevention of dental caries, A., 670.
- Agnew, R. G. See Agnew, M. C.
- Agren, G., pharmacodynamic action and chemistry of secretin, A., 1019.
- Agronofsky, A., cleaning of washing fluids and recovery of solvents, (P.), B., 847.
- Agruss, B. See Stont, L. E.
- Agruss, M. S. See Grosse, A. von.
- Agthe, C. A., [adherent] bituminous surfaces on roads, pavements, etc., (P.), B., 675.
- Aguiar, A., blood-magnesium in normal and pathological conditions, A., 509.
- Aguirreche, F. D., and Castillo, A., analysis of molasses, B., 778.
- Ahlberg, J. E., and Clark, C. W., heat capacity of $Gd_2(SO_4)_3 \cdot 8H_2O$ from 16° to 300° abs., A., 574.
- and Freed, S., specific heat and electronic activation in crystals, A., 574.
- Ahlen, A. van, [solvent] extraction of slurries from Ruhr area, B., 6. Influence of flotation on ash composition and ash m.p. of Ruhr coal slurries, B., 178. Determination of the caking capacity of coal, B., 1123.
- Ahlfeld, F., nickel deposits associated with diabase in Nassau, A., 842.
- Ahlqvist, H., determination of wood pulp in paper by Roo's chlorine number, B., 400. Separation of sulphur from sulphur dioxide, (P.), B., 591.
- Ahlwalia, G. S. See Kaul, K. N.
- Ahmad, B., chemical method of determining vitamin-C, A., 547.
- Desai, R. D., and Hunter, R. F., formation and stability of polybromide derivatives of heterocyclic compounds. V. Bromination of 2-arylimino-4-keto-3-aryl-5-methyltetrahydrothiazoles and their 3:5-dimethyl homologues: theory of singlet linkages, A., 1135.
- Ahmad, Z., oil of *Cassia absus*, A., 1435.
- See also Speers, P. C.
- Ahmed, N., and Hemphill, M. G. [with Ray, F. E.], action of nitrous acid on phenyl-2-hydroxy- α -naphthylmethylamine. II, A., 97.
- Ahnsjö, S., and Oehnell, R., action of hydroxyephedrine on oxygen consumption of the white mouse, A., 397.
- Ahrens, C. E., chemical analyses of New South Wales pasture plants, B., 605. Feeding-trials with iodine for breeding sows, B., 972.
- Ahrens, E., effect of temperature on true specific heat of nickel, A., 20.
- Ahuja, M. L., specificity of antivenomous sera with reference to sera prepared with venoms of Indian and South African snakes, A., 1394.
- Ai, S. See Uchida, S.
- Aihara, S. See Katô, M.
- Aichele, F., germination of cereal seed in media of different hydrogen-ion concentration and resultant changes in reaction, A., 132.
- Aicher, A., Myddleton, W. W., and Walker, James, hydrocarbon oils from industrial gases. I, B., 885.
- Ainslie, T. D. See Du Pont de Nemours & Co., E. I.
- Ainsworth, G. C., effect of fertilisers on tomato plants infected with aucuba mosaic, B., 373.
- Air Preheater Corporation. See Colby, H. S.
- Air Reduction Co., Inc. See Balcar, F. R., Dennis, W., Metzger, F. J., and Van Nuys, C. C.
- Aisner, M. See King, F. B.
- Aitken, T. R., survey of test baking procedures employed in America, B., 171.
- Aitkin, R. S., relation of hypercholesterolemia to increased tolerance for thyroid preparations in nephrosis, A., 1149.
- Aitoff, M., and Dobkevitch, H., rate of disappearance of intestinal bacteria in water, A., 1283.
- Aivazov, B. See Neumann, M.
- Aiyar, S. S., and Krishnan, P. S., modification of Thorpe and Holmes' method for determination of total proportion of methyl, ethyl, isopropyl, and propyl alcohols, B., 539.
- Aizawa, Y., experimental scurvy. XXV. Content of fatty acid, cholesterol, unsaponifiable matter, and nitrogen in faeces of scorbutic guinea-pigs. XXVI. Acid value of petrol extract of faeces. XXVII. Serum-lipase. XXVIII. Volume and constitution of bile, A., 1150.
- Ajax Electric Furnace Corporation, electric induction furnaces, (P.), B., 811.
- Ajax Electrothermic Corporation. See Northrup, E. F.
- Ajax Metal Co. See Neuhauss, H.
- Ajello, T., atractyligenin. IV. Halogenated derivatives, A., 495. Action of hydroxylamine hydrochloride on oximinotriphenylpyrrole, A., 763.
- Akaba, T., modifications of Leusden's method for determining carbon dioxide, A., 422.
- Akabori, S. See Waldschmidt-Leitz, E.
- Akagi, H. See Asahina, Y.
- Akagi, K. See Shikata, M.
- Akai, N. See Kobayashi, Yozo.
- Akano, R., separation of "enolase" and "phosphoglyceromutase," A., 1418.
- Akao, A., rôle of zinc in reproduction: experiments with castrated silk-worms (*Bombyx mori*, L.), A., 1005.
- Akerlöf, G., solubility of noble gases in aqueous salt solutions at 25°, A., 1067.
- and Turck, H. E., solubility of strong, highly soluble electrolytes in methyl alcohol- and hydrogen peroxide-water mixtures at 25°, A., 1314.
- Akermann, A., adsorption of dilute organic vapours by active charcoal and their desorption in pure air, A., 1068.
- Akiyama, K., special Portland cements. I. Hydraulic properties of mangan[ic oxide]-chrom[ic oxide] Portland cement. II. Chemical resistance of manganese-chrome Portland cement to corrosion by sulphuric acid, B., 271, 307.
- Akkermann, A. I. See Voilovitsch, G. I.
- Akoniantz, E. A. See Kirkhgof, G. A.
- Aktiebolaget Defibrator, treatment [sizing] of disintegrated fibrous vegetable material such as wood chips, straw, etc., (P.), B., 943.
- Aktieb. Filtrum, base-exchange water-softening material, (P.), B., 948.
- See also Rybo, B.
- Aktieb. Kemiska Patent, filtering and washing mixtures of solid and liquid materials, (P.), B., 3.
- Aktieb. Mo Och Domsjö Wallboard Co. See Sandell, O. W.
- Aktieb. Separator, pasteurisation of milk and similar liquids, (P.), B., 44. Centrifugal separators, (P.), B., 84, 977, 1076. Centrifugal sludge-separator bowls, (P.), B., 84. Removal of oil from air, (P.), B., 216. Driving mechanism for centrifugal separators, (P.), B., 481. Regulating device for [the feed to] centrifugal separators, (P.), B., 610. Supply of liquid to centrifugal separators, (P.), B., 977.
- and Svensjö, N. E., alcohol from sugar beets and other sugar-containing raw materials, (P.), B., 921.
- Aktieb. Separator-Nobel, centrifugal bowls, (P.), B., 930. Apparatus for [continuous] refining of mineral oils, (P.), B., 983. Dewaxing of mineral oils, (P.), B., 1127.
- and Andersson, G. H., separation of [solid] hydrocarbons, (P.), B., 538.
- and Strezynski, G. J., centrifugal bowl provided with sludge valves, (P.), B., 290.

- Aktieb. Svenska Fläktfabriken, and Edholm, H., drying of vegetable matter, (P.), B., 700.
- Aktieb. Vallevikens Cementfabrik. See Lalin, G. S.
- Aktien-Gesellschaft Brown Boveri & Co., coal-dust mills, etc., (P.), B., 661. Furnaces, (P.), B., 788.
- Akt.-Ges. für Chemische Produkte vorm. H. Scheidemandel. See Pantenburg, V.
- Akt.-Ges. Chemischer Werte. See Ornstein, O.
- Akt.-Ges. für Internationale Patentverwertung, and Lampferhoff, W., coatings on building elements, (P.), B., 320.
- Akt.-Ges. für Stickstoffdünger, acetic acid from acetaldehyde, (P.), B., 539.
- Aktieselskabet Ferrosan, extraction of vitamin-containing unsaponifiable components of fatty matters, (P.), B., 959.
- Aktieselskapet Krystal, maintaining a high and dense suspension of crystals and similar granular solids in a liquid, (P.), B., 51.
- Akumov, E. I., relation between separate and common solubility of the components of a ternary system, A., 929.
- Alabaster, E. C. See Thompson, P. F.
- Alabaster, G. H. See Aubanel, J. E.
- Alakrinskaja, K. A. See Kosmin, N. P., and Resnitschenko, M. S.
- Alam, M. S., change of resistance of cobalt in longitudinal magnetic fields, A., 18. Electrical resistance of cobalt in longitudinal magnetic fields, A., 435.
- Albanese, C. See Bigiavi, D.
- Alber, H. K., improvements in micro-chemical laboratory technique, A., 1098.
- Alberding, C. H. See Universal Oil Products Co.
- Albers, E. See Albers, H.
- Albers, H., phosphatases. V. Restriction of phosphatase by sulphur compounds, A., 1280.
- and Albers, E., phosphatases. I. Kidney-phosphatase. II. Preparation of highly active phosphatase from animal material. IV. Phosphatases of yeast, A., 784, 1280.
- and Meyer, Irmgard, absorption-spectrographic examination of invertase preparations, A., 121.
- See also Euler, H. von.
- Albers, V. M. See Knorr, H. V.
- Albersheim, W. J., and Konheim, H. S., viscosimeter, (P.), B., 84, 388, 1077.
- Albert, G. A., penetration of papers by various oils and varnishes, B., 1040.
- Albert, H., mill baking test [for flour], B., 1019.
- Albert, W. B., arsenic toxicity in soils, B., 420.
- Albert, W. D., and Upson, F. W., action of barium hydroxide on monobasic sugar acids, A., 327.
- Alberti, E. See Andreas, K. R.
- Alberts, A. A., and Bachman, G. B., dehalogenation of $\alpha\beta$ -dibromo-acids. III. Acids of pyridine and quinoline series, A., 1131.
- Alberts, H., absorption of selected organic dyes in region of the visible spectrum and conditions of their constancy, A., 563.
- Albertson, W., application of mechanical interval recorder to analysis of spectrum of osmium I, A., 3. Arc spectrum of samarium and gadolinium; normal electron configurations of the rare earths, A., 556. Spectrum of singly-ionised europium, A., 1438.
- See also Harrison, G. R.
- Albion Sugar Co., Ltd., Gillman, A. H., and Dick, T. S., packing of invert sugar and similar substance for transport purposes, (P.), B., 249.
- Albitzkaja, O. P. See Berkenheim, A. M., and Kirkgof, G. A.
- Albrecht, A. J. See Langley, W. D.
- Albright, R. See Culbertson, J. B.
- Alco Products, Inc. See Cooke, M. B., Erter, J. H., and Wallis, J. S.
- Aldea, G. See Maxim, N.
- Alden, G. R., and Dennison Manufg. Co., adhesive [for cellophane, etc.], (P.), B., 739.
- Alder, K., and Stein, G., thermal polymerisation of cyclopentadiene, A., 203. Steric course of addition and substitution reactions. I. and II. Stereochemistry of diene synthesis. III. *endo-exo*-Isomerism [of norbornyl compounds]. IV. Phenyl azide reaction in fenchene series. V. Steric course of the phenyl azide reaction, A., 211, 219, 341, 349.
- Alderks, O. H., Distel, W. R., Taylor, J. E., and Procter & Gamble Co., [stabilised] edible fat, (P.), B., 1102.
- Alderman, A. R., almandine from Botallack, Cornwall, A., 601.
- Aldick, W., action of cinnamic acid in chloroform, of mercuric chloride, and of tincture of iodine on *Hyphomycetes*, A., 788.
- Aldington, J. N. See Siemens Electric Lamps & Supplies, Ltd.
- Aldis, R. W., effects of hydrochloric acid on shellac varnish, B., 33.
- See also Rangaswami, M., and Venugopalan, M.
- Aldrich, W. W. See Lewis, M. R.
- Aldridge, B. G., and Union Oil Co. of California, distillation of oils, (P.), B., 11.
- See also Gard, E. W.
- Aleev, B., autolysis of algae, A., 533.
- Aleksandrov. See under Alexandrov.
- Alekseev. See under Alekseev.
- Alentzev, M. See Levshin, V.
- Alewijn, W. F. See Honig, P.
- Alexa, G. See Otin, C.
- Alexa, V. See Rădulescu, D.
- Alexander, B. See Ernstone, A. C.
- Alexander, E. See Hirst, H.
- Alexander, H. B. See Hercules Powder Co.
- Alexander, J., nature of enzymes, A., 532.
- Alexander, M. See Edwards, C. A.
- Alexander, P., and Dispersion Cathodique (Disca) Soc. Anon., cathode disintegration, (P.), B., 1100.
- Alexander, P. P. See Gen. Electric Co.
- Alexander, S. C., steel, paint, and corrosion, B., 365.
- Alexander, W., fish oils, B., 641.
- Alexandria Water Co., Ltd., sedimentation apparatus or thickeners, (P.), B., 930.
- Alexandrov, A. I., special cement of high iron content, B., 726.
- Alexandrov, G. P., separation of calcium from rare earths by hydrolysis, A., 459.
- Alexandrov, I. A., physico-chemical properties of sidero-cements, B., 725.
- Alexandrov, L. A., determination of corrosive properties of cracked gasoline, B., 1031. Determination of gums dissolved in cracked kerosine distillates, B., 1032.
- and Sentzov, P. A., refinery scale reforming experiments with the Vickers cracking unit installed in Grozni, B., 1030.
- See also Tarasov, P.
- Alexandrov, N. P. See Belopolski, A. P.
- Alexandrov, N. V., and Ljaskovetz, V. L., accelerated crystallisation of naphthalene from coal-tar oil at coke-chemical plants, B., 1080.
- See also Komar, N. P.
- Alexandrov, V. P., asbestos, B., 851.
- Alexandrova, L. N., soil formation on the coloured clays of Transural, A., 191.
- Alexandrovitsch, V. A. See Brodski, A. I. and Poljakov, M. V.
- Alexandrovskaja, V. A. See Tschailachian, M. C.
- Alexandrovski, V. See Leontjev, H.
- Alexeev, D. V., and Perminov, P., over-voltage and cathodic brittleness of steel, A., 171.
- Alexeev, L. M., concentration of antimony ores from the Kadam-Dzhai deposit, B., 855.
- Alexeev, N. A., refining lubricating oils with liquid sulphur dioxide by the Edlecanu method, B., 133.
- Alexeev, S. V. See Lichoscherstov, M. V.
- Alexeevski, E. V., recovery of vapours of volatile solvents by solid sorbents. I. and II., B., 1036.
- and Azarch, Z. I., determination of moment of passage of vapour through a layer of sorbent by gravimetric indication, A., 1098.
- and Golbraich, Z. E., sorptional and catalytic properties of active manganese dioxide, with reference to vapours and gases. I., A., 160.
- and Platschenov, T. G., influence of physical and chemical factors on activity of charcoal. VI. Influence of carriers on adsorptive properties of charcoal, A., 1069.
- and Ratschinski, F. J., sorption of water vapour from a current of air by inorganic gels, A., 1068.
- Alexis, E., differentiation of methyl and benzyl salicylates [in pharmaceutical preparations], B., 332.
- Alezandrov, A. See Klimov, B. K.
- Alfani, M., pneumatolytic augite from lava from the crater of Vesuvius (1929), A., 601.
- Alfaro, B. A. See De Leon, A. I.
- Alfimova, E. See Essin, O.
- Alford, E. C., spray drying of insecticides and allied chemicals, B., 167.
- Alfred, C. N. See Harris, I.
- Alfvén, H., registration of the ionisation curve of a single α -particle, A., 1048, 1295.
- and Sanner, V. H., extension of ultra-violet wave-length limit, A., 675.
- Algard, G., protecting goods against vermin and insects, (P.), B., 98.
- Algemeene Kunstzijde Unie Naamlooze Venootschap, drying artificial silk in the form of spun cakes, (P.), B., 98, 491. Dressing of artificial silk, (P.), B., 98. Artificial silk, (P.), B., 448.
- Ali-Cohen, E. S., preparation for rendering electric lines and cables and other materials non-inflammable, (P.), B., 812.
- Alicante, M. M., rate of percolation of water through soils and its relation to cane growth, B., 374.
- Alichanian, A. I. See Alichanov, A. I.
- Alichanov, A. I., Alichanian, A. I., and Dzelepov, B. S., artificial radioactivity, A., 420. β -Spectra of some radioactive elements, A., 558. β -Ray spectra of artificially-produced radioactive elements, A., 1186.

- Alichanov, A. I., Alichanian, A. I., and Kosodaev, M. S.**, emission of positrons from a thorium-active deposit, A., 1294. Emission of positrons from radioactive sources, A., 1439.
- Alimarin, I. P.**, chemical composition of tschewkinite, A., 842. [Examination of] mineral products, B., 855.
- Alimehandani, R. L., Shah, N. M., and Deo, S. G.**, effect of substituents on formation of chloralides of salicylic acid and its derivatives, A., 747.
- Alimov, A.** See **De Kolosovski, N. A.**
- Alivisatos, G. P., and Arvanitis, D.**, standardisation of yoghurt testing, B., 331.
- Aljakrinskaja, N.** See **Kulikov, V.**
- Alkaline Earths Co.** See **Borradaile, T. A.**
- Alkins, W. E., and Hallows, A. P. C.**, reduction by hydrogen of stannic oxide contained in H.-C. copper, B., 360.
- See also **Anstey, H. C.**
- Alkin Storage Batteries, Ltd., and Berg, B. M.**, electrodes for alkaline accumulators, (P.), B., 67.
- Allan, H., and Dodds, E. C.**, hormones in the urine following oophorectomy during pregnancy, A., 542.
- Allan, H. L.**, preparation of contact or adsorbent substances [bauxite] and their application [in oil refining], (P.), B., 147.
- Allan, J.** See **Liverpool Refrigeration Co.**
- Allan, J. M.** See **Angell, H. R.**
- Allan, L. P.**, filter sand [for water] experiments, B., 480.
- Allard, G.**, general method of statistics and its application to chemical energetics, A., 1463.
- Allard, J.** See **Naves, Y. R.**
- Allard, (Mme.) S.**, magnetic properties of free radicals; xanthyl- α -naphthylmethyl, A., 149.
- Allcroft, W. M., and Green, H. H.**, blood-calcium and -magnesium of the cow in health and disease, A., 230.
- See also **Green, H. H.**
- Allee, W. C., Bowen, E. S., Welty, J. C., and Oesting, R.**, effect of homotypic conditioning of water on the growth of fishes, A., 525.
- Allegheny Steel Co.** See **Kiefer, G. C., and Scharschu, C. A.**
- Allegri, A.**, cocaine, alcohol, dinitrophenol, and methylene-blue in experimental poisoning by barbiturics, A., 1155.
- Allegri, F.**, general reaction of halogen-tannins, A., 1244.
- Alleman, G., and Sun Oil Co.**, hydrocarbon derivatives of lead, (P.), B., 93. Amyl derivatives of lead, (P.), B., 93. [Coloration of] gasoline, (P.), B., 759.
- Allen, A. J., Franklin, R., and McDonald, E.**, microphotography and radiation effects on living organisms with various wave-lengths of monochromatic ultra-violet light, A., 124, 188.
- See also **Franklin, R.**
- Allen, A. O., and Rice, O. K.**, explosion of azomethane, A., 452.
- Allen, C. F. H., and Overbaugh, S. C.**, use of Grignard reagent for locating ethylenic linkings in polynuclear ring systems. I. Benzanthrone, A., 751. Addition reactions of phenyl vinyl ketone. V. Anthrone, A., 1124.
- Allen, C. H., and Sprinkel, K. M.**, recent developments in natural resin varnishes. II. and III., B., 510.
- Allen, E., Diddle, A. W., and Elder, J. H.**, oestrin content of pregnancy urino and placenta of the chimpanzee, A., 902.
- Gardner, W. M., and Diddle, A. W.**, experiments with theelin and galactin on growth and function of the mammary glands of the monkey, A., 1426.
- See also **Gardner, W. M.**
- Allen, E. C.** See **Moberg, E. G.**
- Allen, E. M.** See **Pittsburgh Plate Glass Co.**
- Allen, E. T.**, geyser basins and igneous emanations, A., 468.
- Allen, F. B., and Allen-Sherman-Hoff Co.**, apparatus for separating liquids from solids, (P.), B., 1076.
- Allen, F. W.** See **McKinnon, L. R.**
- Allen, Frank Worthington.** See **Cerecedo, L. R.**
- Allen, H. E., and McCaleb, A. G.**, coloration and condimentation of foodstuffs, (P.), B., 205, 477. Protein food-colour, (P.), B., 205.
- Allen, H. S., and Longair, A. K.**, inter-nuclear distance and vibration frequency in diatomic molecules, A., 685.
- Allen, I., jun., and Sauter, E. R.**, chemical constitution of rubber in the light of Staudinger's work, B., 512.
- Allen, J. S. V., and Hesthal, C. E.**, intensity relations in chromium spectra, A., 1045.
- Allen, L. A., and Harrison, J.**, determination of volatile acids in bacterial cultures, A., 1541.
- and **Watson, S. J.**, effect of adding whey on chemical and bacteriological composition of silage, B., 698.
- Allen, M. C.** See **Vandecaveye, S. C., and Waksman, S. A.**
- Allen, N. P., and Puddephat, S. M.**, porosity and segregation of two bronze ingots [with 10% tin], B., 932.
- Allen, P., jun.**, preparation of normal aliphatic thiocyanates, A., 479.
- Allen, Ray.**, correlation between freezing and thawing test and the sodium sulphate test for Iowa clays, B., 949.
- Allen, Russell.** See **Bourne, G.**
- Allen, R. H.** See **Berrisford, S. R.**
- Allen, R. L. M.** See **Rowe, F. M.**
- Allen, S. E.** See **Koehler, A. E.**
- Allen, S. J. M.**, scattering coefficients of X-rays at short wave-lengths, A., 1293.
- Allen, T. C.**, application of atomised oil sprays to truck crop insects, B., 1013.
- Allen, W. H.**, grading, sifting, or sorting of solid materials, (P.), B., 531.
- Allen, W. M.**, isolation of crystalline progesterin, A., 1284.
- Butenandt, A., Corner, G. W., and Slotta, K. H.**, nomenclature of the corpus luteum hormone, A., 1284.
- and **Reynolds, S. R. M.**, crystalline progesterin and inhibition of uterine motility *in vivo*, A., 1284.
- Allen, W. S.** See **Gen. Chem. Co.**
- Allen & Co., Ltd., E., and Andrews, H.**, apparatus for drying, calcining, or roasting material such as cement, lime, and other slurry, ore, etc., (P.), B., 657.
- See also **Coles, G. H. N.**
- Allen-Sherman-Hoff Co.** See **Allen, F. B.**
- Alles, G. A., Pinness, G., and Muller, H.**, preparation and stability of food allergen extracts, A., 513.
- Alletson, R. W.** See **North Brit. Rayon.**
- Allgauer Alpenmilch Akt.-Ges.**, sugar preparation from starch, and milk suitable for infants, (P.), B., 1065.
- Allgemeine Elektrizitäts-Gesellschaft**, electrodo furnaces for use as salt-bath furnaces, (P.), B., 237. Lubricating oil, (P.), B., 486. Improving magnetic properties of iron and iron alloys, (P.), B., 504. Magnetic materials [nickel-iron alloys], (P.), B., 556. Beater mills, (P.), B., 657.
- See also **Brit. Thomson-Houston Co. and Knippen, P.**
- Allinger, H. W.** See **Eckert, J. E.**
- Allis, W. P.** See **Morse, P. M.**
- Allis-Chalmers Manufacturing Co., and Newhouse, R. C.**, rotary kilns or furnaces, (P.), B., 129.
- See also **Becker, G. D., and Buss, O. F.**
- Allisbaugh, H. C., and Hyde, R. R.**, fractional ultrafiltration, A., 1342.
- Allison, D. K., and Chem. & Research Corp.**, treatment of photographic emulsions, (P.), B., 126.
- Allison, F.** See **Bishop, E. R.**
- Allison, P. E.**, carbohydrate supply as a primary factor in legume symbiosis, A., 549.
- Hoover, S. R., and Morris, H. J.**, nitrogen-fixation studies with fungi and *Actinomyces*, B., 514.
- Allison, L. B.**, [determination of] organic soil carbon by reduction of chromic acid, B., 1157.
- Allison, R. V.**, importance of special elements in agriculture of S. Florida, B., 115.
- See also **Weller, J. R.**
- Allmänna Svenska Elektriska Aktiebolaget**, electrical eddy-current furnace, (P.), B., 316.
- See also **Stålhan, O.**
- Allner, W.**, town's gas and "synthesis gas" from brown coal; Kassel "concurrent flow retort," Bubiag-Didier system, B., 756. Countercurrent washing of carbon dioxide [from town's gas made from lignite] on the Bubiag-Didier system, B., 979.
- Alloy Research Corporation**, iron-chromium alloys, (P.), B., 907. Rustless iron alloys, (P.), B., 998.
- See also **Arness, W. B.**
- Allport, N. L., and Crews, S. K.**, spectrographic absorption of ergometrine in relation to the B.P. colour test, A., 1512.
- Allsop, G., and Lloyd, H.**, recording manometer having low inertia, A., 600.
- and **Wheeler, R. V.**, ignition of firedamp by broken electric lamp bulbs, B., 211.
- Allsop, T., and Philadelphia Drying Machinery Co.**, treating and drying material, (P.), B., 386.
- Allweiss, M. D.** See **Soskin, S.**
- Allyn, L. B., and Vitamin Food Co., Inc.**, preservation of vitamins, (P.), B., 379.
- Almasy, F., and Krupski, A.**, determination of oxygen capacity of blood at high altitude, A., 1260.
- See also **Frei, W., Krupski, A., Mohler, H., and Ottensooser, F.**
- Almendinger, W.**, malting experiments with naked barleys for distilleries, B., 695.
- Almoslechner, E.**, yeast as an indicator for growth-promoting substance, A., 124.
- Almquist, H. J., and Givens, J. W.**, effects of common food ingredients on iodine content of hens' eggs, A., 1529.
- and **Stokstad, E. L. R.**, dietary hemorrhagic disease in chicks, A., 1148, 1401.
- See also **Givens, J. W., and Lorenz, F. W.**

- Alocco, G., longitudinal and transverse magneto-resistance and magnetic structure of ferromagnetic materials, A., 18. Absorption of cosmic particles in copper and lead, A., 278. Absorption of cosmic particles in elements of various atomic numbers, A., 804.
- and Drigo, A., discontinuity of magneto-resistance in ferromagnetic materials, A., 287.
- See also Rossi, B.
- Alonso, C. S., test of green-manure crops, B., 567.
- Alox Chemical Corporation, insecticidal, fungicidal, and bactericidal compositions, (P.), B., 743*.
- See also Burwell, A. W.
- Alpatov, V. V., and Nastiukova, O. K., susceptibility of infusoria to ultra-violet rays as related to colloidal properties of their protoplasm changed by different physico-chemical methods, A., 120.
- Alpern, D., Simonson, E., Sirkina, G., and Tutkiewitsch, L., rôle of the lungs in removal of lactic acid in physical work, A., 1409.
- Alphen, J. van, bruto-isomerism, A., 324. Alkylethylenediamine derivatives. I. *NN'*-Dibenzylethylenediamine. III. α -Amino- β -benzylaminoethane, A., 337, 1118. Isomeric form of benzil-dihydrazone; preparation of the dihydrazones of benzil and its derivatives, A., 862.
- and Den Otter, H., esters of ethylene- $\alpha\beta$ -dioxamic acid and its derivatives, A., 202.
- and Robert, (Miss) J. L., alkylated ethylenediamine derivatives. II. Reaction between Grignard compounds and $\alpha\beta$ -bisbenzylideneaminoethane, A., 855.
- Alphonse, P., and Baumann, G., effect of duration in the solution on action of thyroxine on tadpoles, A., 1285.
- Alquier, R. See Delépine, M., and Médard, L.
- Alquist, F. N. See Dow Chem. Co.
- Alsa Société Anonyme, Picard, R., and Fays, R., tubular artificial textile threads, (P.), B., 144.
- Alsina, F. D., production of adrenaline in shock, and its rôle in defensive vaso-constriction against hypotension, A., 386.
- Alsop, H. L. See Whitfield Gas Producer Patents.
- Alsted, L. L., removal of printing ink from paper, (P.), B., 541.
- See also Davis, A. B., and Wells, D. S.
- Altamura, M. See Sattler, L.
- Altar, W., rotating polar groups in organic molecules, A., 1192.
- Alten, F., manuring of soils in dry climates. III. Germany, B., 515.
- and Gottwick, R., relationship between transpiration and diffusion in potassium intake by seedlings from nutrient solutions, B., 245.
- and Hille, E., colorimetric determination of ammonia in small quantities of substance. II., A., 463.
- and Kurmies, B., physico-chemical problems in the tillage and manuring of soil, B., 471. Physico-chemical laws for cation exchange in mineral soils, B., 1060.
- Wandrowski, B., and Hille, E., colorimetric determination of aluminium with eriochrome-cyanine. II., A., 1094.
- Alten, F., and Weiland, H., determination of sodium in potassium salts by the uranyl acetate method, B., 627.
- See also Schoenefeldt, O., and Trénel, M.
- Altenkirch, E., recovery of water from atmospheric air, (P.), B., 928.
- Alter, C. M. See Baxter, G. P.
- Alterra A.-G. See Stauffer, R.
- Alterthum, H., Krebs, K., and Rompe, R., self-ionisation of sodium and caesium at glowing tungsten and rhenium surfaces, A., 4.
- and Rompe, R., investigation of the free alkali metals (1930—1933), A., 283.
- Alterum Kredit Akt.-Ges. See Bartling, F.
- Alther, J. G. See Universal Oil Products Co.
- Altman, E. S. See Lutschinski, G. P.
- Altman, R. F. A., preparation of possible antimalarial agents, A., 1017.
- Altmann, L., and Neumtsov, M. S., catalysts for destructive hydrogenation. II. Kinetics of hydrogenation of aromatic hydrocarbons on MoS_2 , A., 940.
- Alton, W. H., Jones, H. I., and Vanderbilt Co., Inc., R. T., treatment [delustering, mildew-, and water-proofing] of textiles [rayons], (P.), B., 898.
- and Vanderbilt Co., Inc., R. T., powdered soap product and its preparation, (P.), B., 416.
- Altschudshan, A. A., Vedenski, A. A., Sharkova, V. R., and Frost, A. V., kinetics of catalytic hydrogenation of hydrocarbons, A., 589.
- Alty, T., and Clark, A. R., diffusion of mercury on tin, A., 578.
- and Johnson, O., cataphoresis of particles of the fatty acids and related compounds, A., 1075.
- and Mackay, C. A., accommodation coefficient and the evaporation coefficient of water, A., 690.
- Aluminium, Ltd., aluminium-base alloys, (P.), B., 810.
- Keller, F., and Craighead, C. M., aluminium-base alloys, (P.), B., 236.
- Keller, F., and Merritt, R. S., aluminium-base alloys, (P.), B., 1148.
- Keller, F., and Sager, G. F., composite metal articles [plated aluminium alloys], (P.), B., 909.
- Wood, R. T., and Heil, O. H., aluminium-base alloys, (P.), B., 557.
- Aluminium-Walzwerke Singen Lauber, Neher Co., G.m.b.H., thick coatings of nitro-derivatives of cellulose on metal foils, (P.), B., 684.
- Aluminium Chloride Oil Refining Corporation. See Carl, B. E.
- Aluminum Colors, Inc. See Work, H. K.
- Aluminum Co. of America, Archer, R. S., and Fink, W. L., aluminium-beryllium alloys, (P.), B., 461.
- Callis, C. C., and Derr, R. B., fluxing composition, (P.), B., 362.
- and Derr, R. B., anhydrous and absolute alcohols, (P.), B., 1113.
- Derr, R. B., and Willmore, C. B., anhydrous and absolute alcohols, (P.), B., 1113.
- Dix, E. H., jun., and Kempf, L. W., heat-treatment of aluminium-magnesium alloys, (P.), B., 236.
- and Edwards, J. D., protecting aluminium from corrosion, (P.), B., 274.
- and Gitzen, W. H., treatment of aluminium hydroxide, (P.), B., 306. Preparation of [thermal] insulation, (P.), B., 578.
- Aluminum Co. of America, Kempf, L. W., and Dawson, J. R., [aluminium] alloy, (P.), B., 193.
- Kempf, L. W., and Dean, W. A., free-cutting [aluminium-base] alloy, (P.), B., 680.
- and Mason, R. B., bright [reflective] aluminium surfaces [e.g., mirrors], (P.), B., 957. Metal deposits in oxide coatings, (P.), B., 1099.
- and Taylor, C. S., cast aluminium rotor winding, (P.), B., 315.
- and Tosterud, M., coating of aluminium, (P.), B., 274. Aluminium hydroxide of low water content, (P.), B., 495. Colouring of aluminium, (P.), B., 1000.
- and Weber, L. J., aluminium alloy [free from stress-cracking under corrosive conditions], (P.), B., 680.
- and Work, H. K., coating, (P.), B., 1000.
- Alvarado, A. M. See Du Pont de Nemours & Co., E. I.
- Alvarez, A. G. See Waldorp, C. P.
- Alvarez, L., interior magnetic field in iron, A., 1452.
- and Compton, A. H., positively-charged component of cosmic rays, A., 8.
- Alvarino, J., and Bonazzi, A., solubilisation of phosphates in organic fertilisers, B., 866.
- Alvey, A. B., Alvey, G. H., Young, E. A., and Uvalde Rock Asphalt Co., extraction of asphalt [from bituminous rock], (P.), B., 180.
- Alvey, G. H. See Alvey, A. B.
- Alvi, S. M. K. See Malik, A. M.
- Alving, A. S., and Van Slyke, D. D., significance of concentration and dilution tests in Bright's disease, A., 885.
- See also Van Slyke, D. D.
- Alvord, E. B. See Grasselli Chem. Co.
- Alway, F. J., and Zetterberg, J. M., relative amounts of calcium carbonate and magnesium carbonate in Minnesota soils, B., 281.
- Amaldi, E., D'Agostino, O., Fermi, E., Pontecorvo, B., Rasetti, F., and Segrè, E., artificial radioactivity produced by neutron bombardment. II., A., 910.
- D'Agostino, O., Fermi, E., Rasetti, F., and Segrè, E., artificial radioactivity produced by neutron bombardment. V., A., 803.
- and Segrè, E., effect of pressure on higher terms of the alkalis, A., 136. Sign and energy of electrons emitted by elements activated by neutrons, A., 803.
- Amantea, F., action of magnesium in experimental uræmia, A., 1528.
- Amati, A., use of bagasse and of residues from manufacture of tannin (quebracho) in the preparation of decolorising charcoal, B., 1079.
- See also Mezzadrolì, G.
- Ambard, L., and Deviller, C., "non-solvent volume" of albuminous liquids, A., 643. Distribution of electrolytes in a solution of albumin, A., 1012.
- See also Trautmann, S.
- Amberg, C. R. See Cole, S. S., and Warren, B. E.
- Amberson, W. R., Flexner, J., Steggerda, F. R., Mulder, A. G., Tendler, M. J., Pankratz, D. S., and Laug, E. P., use of Ringer-Löcke solutions containing hæmoglobin as substitute for normal blood in mammals, A., 878.
- See also McClanahan, H. H., jun., Mulder, A. G., and Webster, M. D.

- Ambler, *H. R.*, and Sutton, *T. C.*, determination of impurities in commercial carbon monoxide, B., 146.
- Ambler, *J. A.*, and Byall, *S.*, impurities in white sugars. VIII. Effects of impurities on decomposition of sucrose during the barley candy test, B., 648. See also Keane, *J. C.*
- Ambrose, *H. A.*, and Loomis, *A. G.*, fluidities of thixotropic gels; bentonite suspensions, A., 164.
- Amco, Inc. See Geer, *P. L.*, and Morton, *W. A.*
- Amdur, *I.*, recombination of hydrogen atoms. II. Relative recombination rates of atomic hydrogen and atomic deuterium, A., 827.
- Amelin, *A. G.*, Moscow vanadium catalyst in practice, B., 268.
- American Anode, Inc., and Beal, *C. L.*, rubber thread or strip, (P.), B., 1104. See also Dales, *B.*, Hansen, *M. E.*, and Szegvari, *A.*
- Amer. Association of Textile Chemists & Colorists, Sub-committee on Light Fastness, comparison of the fading produced by four fading lamps and the sun on forty selected dyeings, B., 353.
- Amer. Bemberg Corporation. See Hardt, *G.*, Hofmann, *H.*, and Ostermann, *W.*
- Amer. Bitumuls Co. See McKesson, *C. L.*
- Amer. Brake Shoe & Foundry Co. See Fahrenwald, *F. A.*
- Amer. Brakeblok Corporation. See Spokes, *R. E.*
- Amer. Brass Co., copper-base alloys, (P.), B., 414, 638. See also Hibbard, *W. R.*, Jennison, *H. C.*, Morell, *P. J.*, Munson, *E. L.*, and Swift, *W. C.*
- Amer. Cement Paint Co. See Moross, *W. P. D.*
- Amer. Chemical Paint Co. See Gravell, *J. H.*
- Amer. Cyanamid Co., Keene's cement, (P.), B., 229. and Kast, *H. A.*, continuous manufacture of hydrochloric acid, (P.), B., 146. See also Ashley, *K. D.*, Bradley, *T. F.*, Christmann, *L. J.*, Cooper, *K. F.*, Cox, *G. E.*, Migrdichian, *V.*, Moffett, *E. C.*, O'Daniel, *E. V.*, and Romieux, *C. J.*
- Amer. Cyanamid & Chemical Corporation. See Daniels, *L. C.*, and Jaeger, *A. O.*
- Amer. Dryice Corporation. See Jones, *C. L.*
- Amer. Engineering Co. See Preston, *H. E.*
- Amer. Enka Corporation. See Bouhuys, *A. G.*, Hubbeling, *J. D. W.*, Moritz, *A. J. L.*, and Thurmond, *G. I.*
- Amer. Face Brick Research Corporation. See Wyatt, *E. M.*
- Amer. Hatters & Furriers Co. See Mercier, *W. C.*
- Amer. Laundry Machinery Co., drying apparatus [for laundered articles], (P.), B., 627.
- Amer. Lead Pencil Co. See Grossman, *H.*
- Amer. Lecithin Corporation. See Conway, *J. W.*, and Working, *E. B.*
- Amer. Lurgi Corporation. See Gensecke, *W.*, Girssewald, *C. von*, Kreisler, *O.*, Mittmann, *P.*, Pontzen, *H.*, Schober, *A.*, and Sterner-Rainer, *R.*
- American Machine & Foundry Co., [heart-shaped] mixing devices or beaters, (P.), B., 883. Mixing devices or whisks, (P.), B., 931. See also Jackson, *D. D.*, and Treuting, *H. R.*
- Amer. Magnesium Metals Corporation. See Hansgirk, *F.*
- Amer. Maize Products Co. See Walsh, *J. F.*
- Amer. Metal Co., Ltd., sweating out of fusible metals, (P.), B., 556.
- Amer. Optical Co. See Moulton, *H. R.*
- Amer. Ore Reclamation Co. See Shallock, *E. W.*
- Amer. Oxythermic Corporation. See Fränkl, *M.*
- Amer. Potash & Chemical Corporation. See Black, *L. G.*
- Amer. Pulverizing Corporation. See Andrews, *N. H.*
- Amer. Research Products, Inc. See Pacini, *A. J.*
- Amer. Rolling Mill Co. See Griffiths, *R. O.*
- Amer. Rubber Products Corporation. See O'Hare, *J. J.*
- Amer. Smelting & Refining Co., treating sulphate solutions of thallium and cadmium, (P.), B., 148. Cadmium, (P.), B., 156. Removing bismuth from lead, (P.), B., 156. Electrodeposition of cadmium, (P.), B., 157. Treatment of ores, metallurgical by-products, etc., to effect a separation of selenium from precious metals, (P.), B., 503. Refining of metals and alloys by vacuum at high temperatures, (P.), B., 556. See also Betterton, *J. O.*, Perkins, *M. F.*, Rutherford, *R. C.*, and Slagle, *E. A.*
- Amer. Steel Foundries. See Walcher, *A.*
- Amer. Steel & Wire Co. of New Jersey. See Elder, *F. C.*
- Amer. Tar Products Co., Inc. See Rhodes, *E. O.*
- Amer. Tool & Machine Co. See Williams, *F. J.*
- Amer. Voith Contact Co., Inc. See Klotz, *J.*
- Amer. Water Works Association, chemical hazards in waterworks plant; chlorine, B., 1072. Tentative methods for testing zeolites, B., 1072.
- Amer. Window Glass Co., and Monro, *W. L.*, laminated glass, (P.), B., 1044.
- Amer. Zinc, Lead, & Smelting Co., zinc sulphide, (P.), B., 948.
- Amerikov, *A. V.* See Kukolev, *G. V.*
- Amiantov, *A. I.*, volumetric determination of calcium and magnesium in water (micro-method), B., 48.
- Amiel, *J.*, preparation and properties of cupritetra-chlorides and -bromides, A., 312. Complex cupric perchlorates and bromates formed with primary amines, A., 591.
- Amies, *C. R.* See Schlesinger, *B.*
- Aminoff, *G.*, new mineral from Långban (sahlinite), A., 1100. and Broomé, *B.*, electron photographs of graphite, A., 18. Transmission photographs of single crystals with fast electrons, and their use in structure determination, A., 1476.
- Ammer, *G.*, and Müller-Neuglück, *H. H.*, laboratory and works tests with interior paints for boilers, B., 1151.
- Ammon, *R.*, and Kwiatkowski, *H.*, formation of acetylcholine in serum and embryonal extract, A., 103. and Schütte, *E.*, behaviour of enzymes in hen's eggs during incubation, A., 389. and Voss, *G.*, acetylcholine-destroying action of blood, A., 1279.
- Amoroso, *E. C.*, colchicine and tumour growth, A., 515.
- Amoureux, *G.*, *Bacterium tumefaciens*, Smith and Townsend: biochemistry of two varieties of different pathogenicity, A., 1029. See also Berthelot, *A.*
- Ampt, *G. A.*, volumetric determination of sulphates, A., 462. See also Norris, *J. H.*
- Amstutz, *A.*, and Borloz, *A.*, synthesis of emerald, A., 833.
- Amundsen, *L. H.*, and Pollard, *C. B.*, preparation of acyl and benzenesulphonyl derivatives of *o*-aminophenol, A., 1361. Acyl derivatives of *o*-anisidine, A., 1490. See also Pollard, *C. B.*
- Amy, *L.*, properties and structure of solutions of gum gels, A., 32. See also Fabre, *R.*
- Anaconda Copper Mining Co., and Yates, *C. E.*, electrodeposition [of copper foil], (P.), B., 557.
- Anaconda Wire & Cable Co. See Maring, *A.*
- Ananiaschirli, *E. G.* See Gogoberidze, *D. B.*
- Anantakrishnan, *S. V.*, and Ingold, *C. K.*, influence of substituents on additive reactivity of ethylene derivatives. II. Effects of catalysis on relative rates of addition of bromine. III. Addition of bromine in solution, A., 1103, 1465.
- Ananthakrishnan, *R.*, photo-electric photometry of light scattering in fluids, A., 11. Convergence error in depolarisation measurements, A., 1301. Raman spectrum of heavy water, A., 1301, 1445. Depolarisation of light scattering in gases and vapours, A., 1301.
- Ananthanarayanan, *K. G.* See Damodaran, *M.*
- Anciens Établissements Le Clezio, mills or grinders for paints or other substances in viscous or pasty form, (P.), B., 833.
- Anc. Établ. A. Savy Jeanjean & Co. See under Soc. Anon. Anc. Établ. A. Savy Jeanjean & Co.
- Andale Co., and McNeal, *D. R.*, fluid-straining apparatus, (P.), B., 658. See also Jenkins, *J. M.*
- Andant, *A.*, Lambert, *P.*, and Leeomte, *J.*, diffusion spectra (Raman effect) and infra-red absorption spectra of saturated aliphatic alcohols and ethylenic hydrocarbons, A., 1190.
- Anders, *K.* See Wachholder, *K.*
- Andersch, *M.*, and Gibson, *R. B.*, effects of intravenous injections of colloids. I. Deposition of acacia in liver and other organs and its excretion in urine and bile, A., 246.
- Andersen, *A. C.*, feeding-stuff analysis and determination of digestibility, B., 572. and Levine, *V. E.*, reaction to differentiate vitamin-A from carotene by means of antimony trichloride, A., 1428.
- Andersen, *A. H.* See Mason, *G. M.*
- Andersen, *B.*, and Celluloid Corp., preparation of articles from cellulose derivatives, (P.), B., 1056.
- Andersen, *D. H.*, effect of ovarian hormone on the pituitary, thyroid, and adrenal glands of spayed female rats, A., 791.
- Andersen, *G.*, reduction of ores and furnace therefor, (P.), B., 29.
- Andersen, *H.*, plating with rhodium and rhenium, B., 555.
- Andersen, *H. P.* See Hart, *M. C.*
- Andersen, *O.*, plasma-phosphatase in normal and rachitic children, A., 1279.

- Anderson, A. B. See Tompsett, S. L.
- Anderson, A. B. C., and Goetz, A., recrystallisation of thin metallic layers, A., 1450.
- Anderson, A. E. See Macy, H.
- Anderson, A. F. S., [gold ore] tailings treatment at Bendigo, B., 104.
- Anderson, A. K., and Emmart, K., relation of amino-acids to carbon dioxide and mycelium production of *Fusarium oxysporum*, A., 254.
See also Pritham, G. H.
- Anderson, C. See Greenberg, D. M.
- Anderson, C. A., alteration of the lavas surrounding the hot springs in Lassen Volcanic National Park, California, A., 842.
- Anderson, C. D., and Neddermeyer, S. H., positrons from γ -rays, A., 8. Relation of the positron energy spectrum to decay constant and to energy of the bombarding protons, A., 1439. Secondary photons in cosmic-ray showers, A., 1442.
See also Neddermeyer, S. H.
- Anderson, C. T., heat capacities at low temperatures of oxides of strontium and barium, A., 574.
- Anderson, C. W., determination of small quantities of antimony in white metals; volumetric method, B., 64.
- Anderson, C. W. (Scotland), modern proofing [with rubber], B., 369.
- Anderson, D., critical solution temperature in alcohol of castor oil, B., 597.
- Anderson, D. A., and Walker, R. H., influence of nitrogenous compounds on the respiratory quotient of *Rhizobium*, A., 1420.
- Anderson, D. F., ketone content of blood in labour and pre-eclamptic toxæmia, A., 385.
- Anderson, D. G., Collet steel, (P.), B., 461.
- Anderson, D. Q. See Levine, M.
- Anderson, Ernest, and Fireman, M., [composition of] the mucilage from psyllium seed (*Plantago psyllium*, L.), A., 797.
and Krznarich, P. W., hemicellulose from oat hulls, A., 1485.
- Anderson, Evald, and Internat. Precipitation Co., electrical precipitating apparatus [for gases], (P.), B., 1149.
- Anderson, E. A., Fuller, M. L., Wilcox, R. L., and Rodda, J. L., high zinc region of the copper-zinc phase-equilibrium diagram, A., 158.
See also Kroll, L., and Waring, R. K.
- Anderson, E. J., activated carbon application in water system without filters, B., 528.
- Anderson, E. M. See Collip, J. B.
- Anderson, F. F., apparatus for physiological experiments, A., 1552.
- Anderson, H. E. See Watson, Ltd., R. & W.
- Anderson, H. H. See Emerson, G. A.
- Anderson, H. L. See Whitnah, C. H.
- Anderson, H. W. See Kadow, K. J.
- Anderson, John A. See Standard Oil Co.
- Anderson, John Ansel, nature of rust-resistance in wheat. VI. Effect of p_{H_2} , phenolic compounds, and host extracts on germination of urediniospores of *Puccinia graminis tritici*, form 21, A., 269.
- Anderson, J. E., and Plibrico Jointless Firebrick Co., preparation and application of plastic refractory, (P.), B., 993.
- Anderson, K. D., and Hammick, D. L., kinetics of depolymerisation of bimolecular nitrosoisopropylacetone, A., 307.
- Anderson, L. C., absorption spectra of free radicals, A., 1299.
and Gooding, C. M., halochromism of ketones. II, A., 913.
See also Bates, J. R., and Halford, J. O.
- Anderson, L. D., and Walker, H. G., life history and control of the potato flea-beetle (*Epitrix cucumeris*), Harris, on the eastern shore of Virginia, B., 327.
See also Walker, H. G.
- Anderson, M. X. See Crandall, L. A., jun., and Reid, P. E.
- Anderson, O. E., analysing sulphite[pulp] mill problems, B., 719.
- Anderson, P. A., contact difference of potential between tungsten and barium; external work function of barium, A., 1061.
See also Meng, C. Y., and Wei, P. H.
- Anderson, R. C. See Chen, K. K.
- Anderson, R. J., Newman, M. S., and New Haven Dispensary, hydroxyquinone compounds, (P.), B., 1165.
- Anderson, T. F., and Yost, D. M., Raman spectrum of deuterium, A., 681.
See also Wulff, P.
- Anderson, W. C. See Loeb, L.
- Anderson, W. E., and Williams, H. H., biochemical aspects of fats. I, A., 772.
See also Light, A. E., and Williams, H. H.
- Anderson-Tully Co. See Ward, N. C.
- Anderssen, H., plating with rhodium and rhenium, B., 809.
- Andersson, B., Schardinger enzyme and co-enzymes involved in phosphorylation and oxido-reduction, A., 1414.
- Andersson, G. H. See Aktieb. Separator-Nobel.
- Andes, E. J., and Beard, H. D., effect of inorganic iron with and without ultraviolet irradiation on prevention and cure of nutritional anemia, A., 235.
- Andes, J. E., determination of blood-cholesterol, A., 1392.
- Anding, O. E., jun. See Malisoff, W. M.
- Andô, A. See Andô, N.
- Andô, N., sorption of basic dyes on cellophane, A., 697.
and Andô, A., electrokinetic potentials. I. Measurements at the interfaces between fibres and water, A., 698.
- Andô, S., catalytic hydrogenation of phenolic oil in low-temperature tar. II. Effect of hydrogenating conditions. IV. Formation of high-boiling acetic acid esters, B., 259. High-pressure hydrogenation of low-temperature tar. II. Comparison between the derived neutral and phenolic oils. III. Effects of catalysts and hydrogenating conditions, B., 613, 836. Catalytic hydrogenation of neutral oil from low-temperature tar. I. Effect of catalysts, B., 933.
- Andrá, M., influence of firing temperature on resistance to freezing of clays, B., 1094.
- Andrac, M. See Gaujoux, E.
- Andrade, E. N. da C., plasticity of rock-salt crystals, A., 435. Crystallisation of thin metal films, A., 1307.
and Hutchings, P. J., mechanical behaviour of single crystals of mercury, A., 288.
and Martindale, J. G., structure and physical properties of thin films of metal on solid surfaces, A., 1449.
- André, A., action of sulphurous acid on leaf cells, A., 1551.
- André, E., and Bloch, Armand, oils from marine animals; new group of lipins; ether-esters of glycerol, A., 1145. Application of fractional extraction to analysis of vaseline, B., 710.
and Vernier, C., rotatory power of ricinoleamide, A., 851, 1486.
- Andreadis, T. B., and Toole, E. J., distribution of nicotine in raw tobacco, B., 174.
- Andrae, F. V., reactance of large rectangular three-phase electric furnaces, B., 557.
- Andreas, K. R., and Alberti, E., X-ray examination of barium-aluminium alloys, A., 1065.
- Andreasen, A. H. M., and Berg, S., use of the pipette method of determination of grain size, especially of mineral colours, B., 609.
- Andreatta, C., orientation of mica micro-liths in plagioclases from eruptive rocks, A., 1479.
- Andreev, D. N. See Petrov, A. D.
- Andreev, E. A., influence of a metal surface on kinetics of oxidation of ethane, A., 830.
- Andreev, K. See Balarev, D.
- Andreev, K. K., kinetics of thermal decomposition of calcium azide, A., 453. Burning of explosives, B., 430.
and Charlton, J. B., mechanism of self-propagating chain reactions, A., 708.
- Andreev, L., and Pugsley, L. I., effects of hypercalcaemia produced by parathyroid hormone and irradiated ergosterol on the activity of the cerebral cortex by means of conditioned reflexes, A., 539.
- Andreev, N. N., and Andreeva, E. V., coagulation of drinking water by aluminium sulphate, B., 48. Application of photo-elements to determination of salts in natural waters, B., 48.
and Avtonomova, E. S., optimum conditions for coagulation of R. Neva water, B., 48.
and Kulikova, L. E., transition of gas from the dissolved to the dispersed state, A., 1067.
- Andreev, N. Z., preparation of phosphorescent zinc sulphide, A., 944.
- Andreev, P. I. See Stender, W. W.
- Andreev, S. See Georgievski, S.
- Andreev, V., and Vershbovskaja, A., kaolin as an ingredient of rubber mixes, B., 467.
See also Zacharova, F.
- Andreeva, E. V. See Andreev, N. N.
- Andreevski, D. N., and Chegis, A. F., acidic fractions of tars from Petrograd shales, B., 53.
- Andreitcheva, M., biological chemistry of zinc. II. Effect of zinc salts on hydrolysis of triacetin by pancreatic lipase. III. Influence of zinc salts on activity of salivary diastase, A., 404.
- Andrew, J. H., and Elliss, H., heterogeneity of steel ingots. IX. Mechanical properties of carbon steels melted *in vacuo* and in certain gases, B., 994.
- Raine, T., and Vickers, J. B., heterogeneity of steel ingots. I. Introduction. II. Examination of further ingots. III. Origin and formation of inclusions, B., 994.
and Richardson, G. T., spring steels, B., 634.
- and Trent, E. M., heterogeneity of steel ingots. X. Segregation in steel ingots, B., 994.

- Andrew, *T.*, apparatus for controlling humidity and temperature of air, (P.), B., 659.
See also Seem, *W. P.*
- Andrews, *A. I.*, and Mullady, *R. E.*, re-boiling of sheet-iron ground-coat enamels, B., 149.
- Andrews, *D. B.*, and Connor, *R.*, Michael condensation. III. Addition of simple ketones, A., 981.
See also Connor, *R.*
- Andrews, *D. H.*, Deitz, *V.*, and Goldheim, *S.*, calculating molecular vibration frequencies, A., 10.
See also Deitz, *V.*, Murray, *J. W.*, and Teets, *D. E.*
- Andrews, *G.*, apparatus for recovering commercially valuable constituents from industrial waste products by distillation processes, (P.), B., 656.
- Andrews, *H.* See Allen & Co., Ltd., *E.*
- Andrews, *H. L.*, acoustic interferometer for a wide temperature range, A., 952.
- Andrews, *J. T. R.*, glycerin analysis, B., 639. Gaseous decomposition products of rancid oils, B., 733.
- Andrews, *L. V.*, and Brown, *D. J.*, oxidation potential of the alkaline permanganate-manganese dioxide electrode, A., 450.
- Andrews, *N. H.*, Willoughby, *W. J.*, and Amer. Pulverizing Corp., [pneumatic] separator, (P.), B., 3.
- Andrews, *N. R.*, reclaiming bone black and similar materials, (P.), B., 757.
- Andrews, *P. A.* See Ashmore, Benson, Pease & Co., Ltd.
- Andrews, *P. R.* See Finlayson, *A.*
- Andrews, *W. B.*, carbon dioxide production by mannitol-treated soils as a means of determining crop response to fertilisers, B., 282. Effect of nitrogen content of ryso on its rate of decomposition [in soil], B., 1110.
- Andreyev. See under Andreev.
- Andriessen, *R.*, influence of temperature on intensity of X-ray reflexion from silver, A., 801.
- Andrieu, *O.*, influence of chemical composition of the steel on the sticking of thin sheet, B., 1047.
- Andriot, *J.* See Meunier, *M.*
- Andriuschtschenko, *S. A.* See De Kolo-sovski, *N. A.*
- Andrussov, *L.*, catalytic oxidation of ammonia-methane mixtures to hydro-cyanic acid, A., 1329.
- Andrzejewski, *H.* See Przylecki, *S. J. von.*
- Anestad, *S.* See Bring, *G. G.*
- Anfinogenov, *P. Z.* See Potolovski, *L. A.*
- Angelescu, *B. N.* See Vanghelovici, *M.*
- Angelescu, *E.*, and Mazilu, *N.*, titration of substances affecting the surface tension of water, A., 1317.
and Vladescu, *C.*, calcium saccharates, B., 870.
See also Zaharia, *A.*
- Angelescu, *H.* See Băltăceanu, *G.*
- Angeletti, *A.* [with Rocchietta, *S.*], determination of rayon in rayon-cotton mixtures, B., 718.
and Ponte, *D.*, gluconic fermentation. XI. Influence of iron on gluconic fermentation of *Penicillium crustaceum* (L.), Fries, A., 1166.
- Angelini, *M.* See Hemmeler, *A.*
- Angelini, *V.*, ammonia, urea, and p_H of urine in infants, healthy and with nutritional disturbances, A., 1267.
- Angell, *C. H.* See Universal Oil Products Co.
- Angell, *H. R.*, Hill, *A. V.*, and Allan, *J. M.*, downy mildew (blue mould) of tobacco; its control by benzol and toluol vapours in covered seed-beds, B., 1061.
- Angelopulo, *K.*, and Sklovski, *M.*, liming and pickling hides, B., 817.
- Angenot, *P.* See Henri, *V.*
- Anger, *V.* See Feigl, *F.*
- Anglo-Iranian Oil Co., Ltd., Thole, *F. B.*, and Birch, *S. F.*, refining of hydro-carbon liquids, (P.), B., 937.
- Angola Chemical Corporation. See Snyder, *C.*
- Angstadt, *H. F.* See Pew, *A. E., jun.*
- Anguera, *I.* See Oriol, *A.*
- Angus, *W. R.*, Bailey, *C. R.*, Gleave, *J. L.*, Leekie, *A. H.*, Raisin, *C. G.*, Wilson, *Christopher L.*, and Ingold, *C. K.*, Raman spectra of deuterobenzenes and structure of benzene, A., 914.
- Bailey, *C. R.*, Ingold, *C. K.*, Leekie, *A. H.*, Raisin, *C. G.*, Thompson, *J. W.*, and Wilson, *Christopher L.*, infra-red spectrum of hexadeuterobenzene and the structure of benzene, A., 1444.
and Leekie, *A. H.*, the NO^+ radical, A., 1056. Raman spectra. II. Raman spectra of perchloric acid and nitrosyl perchlorate, A., 1190.
- Leekie, *A. H.*, and Wilson, *Christopher L.*, Raman spectrum of trideuteracetic deuteracid, A., 806.
See also Leekie, *A. H.*
- Anissimov, *S. B.* See Platonov, *M. S.*
- Anitschkoff, *N.* See Liebermann, *H.*
- Annau, *E.*, significance of fumaric acid in respiration of animal tissues. VI. Fumaric and malonic acids, A., 1406.
and Gözsy, *B.*, distribution of arginine in Jensen rat sarcoma, A., 381.
- Annetts, (*Miss*) *S. M.*, effect of cathode rays on hydrophobic sols, A., 821.
and Sims, *H.*, specific heats and densities of hydrophobic sols, A., 163.
- Annis, *H. M.*, testing and classification of coated papers, B., 540.
- Ansbacher, *S.*, Flanigan, *G. E.*, and Supplee, *G. C.*, foam-producing substances in milk, B., 250.
See also Supplee, *G. C.*
- Anselm, *A. J.*, and Fansteel Products Co., Inc., drawing of [molybdenum] wire, (P.), B., 362.
- Anselmino, *K. J.*, Herold, *L.*, and Hoffmann, *Friedrich*, corticotropic hormone of the anterior pituitary, A., 667. Adrenaltropic substance of the anterior pituitary, A., 1283.
and Hoffmann, *Friedrich*, acetoneuria following treatment with the fat metabolism hormone of the anterior pituitary, A., 411. Separate action on liver-glycogen and blood-ketones of the carbohydrate- and fat-controlling hormones of the anterior pituitary, A., 411. Pituitary mechanism regulating carbohydrate metabolism and its disturbance in diabetes mellitus; anterior pituitary hormone regulating carbohydrate metabolism, A., 411. Thyroid action in pregnancy; presence of the thyroid hormone in blood in pregnancy, A., 1270. Excretion of the so-called synergistic gonadotropic factor of the anterior pituitary in urine of castrates, A., 1524. Action of anterior pituitary fractions on blood-sugar, A., 1544.
- Anshmid, *Z. V.* See Model, *L. M.*
- Ansidei, *R. M.* See under Manzoni-Ansidei, *R.*
- Anson, *M. L.*, crystalline carboxypolypeptidase, A., 897.
See also Mirsky, *A. E.*
- Anson, *E.* See Bartel, *R.*
- Anstey, *H. C.*, Alkins, *W. B.*, and Bolton & Sons, Ltd., *T.*, zinc alloys, (P.), B., 956.
- Ant-Wuorinen, *O.*, determination of methyl alcohol in [ethyl] alcohol and [ethyl]-alcoholic beverages, B., 424.
- Anthes, *H.*, and Salzmann, *F.*, absorption of iodine from baths through the skin and its fate in the organism, A., 115.
- Anthony, *A. W., jun.*, and Pease, *Anthony Equipment Co.*, gas-scrubber system, (P.), B., 1077.
- Anthony, *B. F.*, apparatus for ascertaining temperature of hot bodies, (P.), B., 85.
- Anthony, *H. L.* See Sauveur, *A.*
- Anthony, *P. L.* See Abrams, *A.*
- Anthony, *R. S.* See Lund, *A. A.*
- Antipov, *A. A.*, and Mozgova, *K. K.*, preparation of *p*-nitroaniline sulphates, and of free base from them, B., 91.
- Antipov-Karataiev, *I. N.*, soil chemistry in the U.S.S.R., B., 71.
and Antipova-Karataieva, *T. F.*, adsorption of potassium by soils, B., 1107.
and Chainsky, *I. A.*, study of humate formation [in soils] by electrochemical methods, B., 1106.
See also Prasolov, *L. I.*
- Antipova-Karataieva, *T. F.* See Antipov-Karataiev, *I. N.*
- Antoine, *G.*, dust in the organism. III. Partition of silica dust in the lungs, A., 1527. Determination of silver in organic medicinals; colloidal silver ointment, B., 654.
- Anton, *G.*, and Birk, *E.*, metabolism during chronic morphine action. V. Pathology of morphine, A., 397.
- Antoniani, *C.*, enzymic transformation of phosphoglyceric acid into pyruvic acid by embryos of *Sorghum saccharatum*, A., 897.
- Antonić, *S.* See Kilian, *V.*
- Antonioti, *D.*, acidobacteria in the mouth and their decalcifying action on the teeth, A., 1420.
- Antonov, *L. I.*, Kaltsehevski, *K. A.*, Ruguzov, *A. M.*, Faktulin, *K. N.*, and Katarian, *T. G.*, effect of moisture content of soil on quality and quantity of grain in spring wheat, B., 37.
- Antonov-Romanovski, *V. V.*, influence of unequal distribution of phosphorescence centres on Leonard phosphors, A., 915. Fading of zinc phosphors in single crystals. III., A., 1302.
See also Levshin, *V. L.*
- Antopol, *W.*, Schiffrin, *A.*, and Tuchman, *L.*, blood-amylase response to acetylcholine and its modification by eserine and atropine, A., 1536.
- Antoschtschenko, *I. I.* See Tananaev, *N. A.*
- Antusz, *L. I.* See Petrov, *A. D.*
- Anurjeva, *V.* See Sehorigin, *P. P.*
- Anxionnaz, *R.* See Mazó, *P.*
- Anzelevich, *V. A.* See Pentegov, *A. P.*
- Aoe, *I.*, and Kitayama, *H.*, combined use of two different [vulcanising] accelerators. V. Mercaptobenzthiazole and hexamethylenetetramine, B., 512.
See also Mintatoya, *S.*
- Aoki, *H.* See Kikuchi, *Seishi*.

- Aoki, M. See Tanaka, Y. *Yoshio*.
Aoki, Y. See Itaka, I.
Aoyama, S., and Fukuroi, T., action of various elements and compounds on photographic plates. II., A., 1087.
Fukuroi, T., and Takahashi, Ichiro, action of various elements and compounds on photographic plates. I., A., 47.
and Kanda, E., oxidation-reduction equilibrium of metallic chromium, A., 704. Heat capacities at low temperatures. I. Heat capacities of some organic substances, A., 1063. Sublimation pressures of solid oxygen and nitrogen, A., 1064.
Aoyama, Y., action of drugs on liverglycogen, A., 1156.
Apanasenko, M. V. See Adadurov, I. E.
Apar, F. A., Beach, K. A., and Sinclair Refining Co., refining of hydrocarbons, (P.), B., 11. Apparatus for refining hydrocarbons, (P.), B., 663.
Apollo Steel Co. See Holloway, H. H.
Apostolou, A., solid fuels ignitable by means of a spark, (P.), B., 393.
Apotheker, C. See Soc. Chem. Ind. in Basle.
Appareils & Evaporateurs Kestner, evaporating apparatus for concentrating acid liquids, (P.), B., 610. Evaporating apparatus, (P.), B., 930.
Appel, H., preparation of *l*-xylose, A., 734. Synthesis of coumarins by von Pechmann's method, A., 1128.
and Robinson, R., transformation of *d*-catechin into cyanidin chloride, A., 757. Constitution of cyanomaculurin, A., 985.
See also Fischer, H. O. L.
Appel, J. See Transparent Paper, Ltd.
Appel, W. D., fading of dyes in radiation of different intensities, B., 670.
Appleby, M. P., chemistry of sulphur, B., 186.
Crawford, F. H., and Gordon, K., vapour pressures of saturated solutions; lithium chloride and lithium sulphate, A., 35.
Appelman, D. See Cameron, S. H.
Appleton, C. D. S., filter, (P.), B., 1075.
Appleton, L. F., and Sherwin-Williams Co., purification of vegetable oils, (P.), B., 733.
Appleyard, K. C., and Birtley Co., separation of coal, etc., (P.), B., 259.
Flint, A., and Birtley Co., separation of mixed materials, e.g., coal with shale, (P.), B., 1075.
Apsits, J., deep cultivation [of soils] in the light of seven years' investigation, B., 865.
Apte, K. R. See Rane, M. B.
Arai, J., spontaneous hydrolysis of salol-phosphoric and phenylphosphosalicylic acids, A., 343.
Araki, G., calculation of X-ray terms according to Heisenberg's theory on electron holes, A., 1185.
Araki, T., and Makabayashi, M., miscibility of gasoline and technical alcohol for aero-engine fuel, B., 293.
Takahashi, S., and Mori, S., chilled plate glass. V. Bending strength, Young's modulus, and stress-strain relation of the glass, B., 187.
Arbusov, A. E., methyl ester of phenylphosphorous acid, A., 228.
and Lugovkin, B. P., preparation of furfuraldehyde, B., 56.
Arbusov, A. E., and Rasumov, A. I., tautomeric transformations of certain organic phosphorus compounds, A., 72.
Saizev, J. A., and Rasumov, A. I., preparation of substituted indoles by catalytic decomposition of phenylhydrazones, A., 1378.
Arbusov, B. A., [isomerisation of α -pinene to an aliphatic terpene (*alloocimene*)], A., 89. Action of acetaldehyde and crotonaldehyde on *alloocimene*, A., 1246. Isomerisation of terpene oxides. I. Isomerisation of α -pinene oxide during Reformatsky's reaction, A., 1246. Composition of Russian turpentine oil, B., 160.
and Abramov, V. S., dehydration of linalool and structure of the terpene obtained thereby, A., 88.
and Schapschinskaja, O., attempted preparation of 1:3-dimethylcyclohexanecarboxylic acid, A., 620.
Arbusov, G. A., effect of pretreatment of raw hides on fixation of tannin, B., 419.
Michailov, A., and Sokolov, S. I., theory of vegetable tanning, B., 818.
Arbusov, J. A. See Zelinski, N. D.
Arbusova, I. A., composition of turpentine from fir scrape, B., 1054.
Archangelski, A. D., and Koptschenova, E. V., dependence of chemical composition of sedimentary iron ores on conditions of formation, A., 1347.
Archarov, V. I., and Scharoiko, P. M., röntgenographic determination of admixtures to metals, B., 272.
Archbold, H. K., and Barter, A. M., physiology of apples. XV. Relation of carbon dioxide output to loss of sugar and acid in Bramley's seedling apples during storage, A., 131.
Archer, C. T., thermal conductivity and accommodation coefficient of carbon dioxide, A., 691.
Archer, R. S., Matush, M. A., and Smith Corp., A. O., melting of copper to produce dense castings low in oxygen, (P.), B., 595.
See also Aluminum Co. of America.
Archibald, F. M. See Standard-I. G. Co.
Archibald, J. G., and Bennett, E., phosphorus requirement of dairy heifers, A., 1409. Yield and chemical composition of species of grass, B., 867.
Archibald, R. C. See Evans, H. M.
Archinard, P. See Ferré, L.
Ardagh, E. G. R., and Bowman, W. H., removal of thiophen from benzene by acidified hypochlorite solutions, B., 885.
Richardson, R. E., Richardson, L. A., and Humber, C. M., adsorption by precipitated barium sulphate, A., 28.
and Rutherford, F. C., hydrazine and osazone reactions, A., 963.
Ardashev, B. I., and Leonov, B. I., delinting cottonseed with gaseous hydrogen chloride, B., 444.
Sakostschikov, A. P., Leonov, B. I., and Raskina, R. L., composition of cotton hybrids, B., 444. Composition of cotton from various regions, B., 444.
Ardenne, M. von, and Haas, E., rapid measurement of optical absorption for small light intensities, A., 1475.
See also Cossor, Ltd., A. C.
Ardill, W. See Sturtevant Eng. Co.
Arditti, G., autoxidation of *n*-hexadecane, A., 1208.
Arefiev, N. See Lomakin, F.
Arend, A. G., wire for resistance furnaces, B., 158. Sugar drying: centrifugal efficiency, B., 823.
Arends, E., efficiency coefficient, *u*, of the characteristic *K*-radiation and the ratio of ionisation of air to energy of X-rays, A., 556.
See also Küstner, Hans.
Arenella, Società Italiana per l'Industria dell' Acido Citrico ed Affini, citric acid, (P.), B., 348.
Arens, H., [photographic] density surfaces by physical development, A., 712. Density surface of [a solid diagram representing] the Villard effect. III., A., 943.
Arey, L. S., [photographic] ultra-fine grain by modified physical development, B., 1069.
Argabrite, G. M., leather processing, (P.), B., 1106.
Argue, G. H., and Maass, O., measurement of the variation of dielectric constant of water with extent of adsorption, A., 1447. Heats of wetting of cellulose and wood pulp, B., 667.
Arho, A. See Routala, O.
Aribert, See Vidal.
Arii, K., sorption of sulphur dioxide by active charcoal. II. Effect of heating on sorptive power of coconut charcoal. III. Sorption equilibrium at high temperatures. IV. Hysteresis. V. Mechanism, A., 159, 577.
Arima, K., influence of sympathetic depressant poisons as ergotoxine, thymoxyethylmethylamine, and thymoxyethylallylamine on excretion of sodium chloride and water by the kidneys, A., 894. Influence of local anaesthetics on the cornea after extirpation of the superior cervical ganglion, A., 1410.
Arimoto, K., relationship between nutrition and enzymic activity of blood-serum, A., 1035.
Ariyama, N., anaerobic decomposition of hexosephosphoric acids by animal tissues. I., A., 402.
Ariyama, T., relation between kinds of carbohydrate and vitamin-*B*₁ deficiency, A., 415.
Arkadev, V., chemical registration of diffraction of electric waves, A., 4. Permeability of iron at ultra-radio frequencies, A., 19. Chemically fixed trace of electric waves, A., 58. Magnetic and electric spectra in high frequency, A., 908.
Arkel, C. G. van, determination of small quantities of morphine, A., 640.
and Weilen, P. van der, spectrographic investigation of quina-alkaloids, B., 1117.
Arkhipov, M. S. See Maklakov, N. F.
Arkina, S. E. See Moldavski, B. L.
Arloing, F., Morel, A., and Josseland, A., effect on experimental tumours of product obtained by action of ferric chloride on ascorbic acid, A., 649. Intravenous injection in cancer of products of the ferric chloride-ascorbic acid reaction, A., 775. Action of iron-vitamin-C preparations on tumours, A., 1401. Action on an experimental tumour of intravenous injections of ascorbic acid unassociated with iron, or associated with copper, A., 1526. Action on experimental and human cancer of injections of combinations of iron and vitamin-C (ascorbic acid), A., 1526.

- Armand, and Blanquet, physical and chemical methods of control of mineral waters, B., 332.
and Lescoeur, flocculation of water containing bicarbonate, B., 576.
- Armand, L., mildew of wool, B., 1135.
- Armanet, E. L. J., sizing of [artificial] textile fibres, (P.), B., 627.
- Armbruster, M. H., and Crenshaw, J. L., thermodynamic study of potassium amalgams, A., 170.
See also La Mer, F. K.
- Armeanu, F. See Spacu, G.
- Armenault, R. See Fabriques de Prod. de Chim. Org. de Laire.
- Armitage, D. See Milligan, L. H.
- Armour & Co. See Christensen, Carl W., Conquest, F., and Woodward, C. B.
- Armsby, S. P., chemical lime hydrate [calcium hydroxide], B., 543.
- Armstrong, A. R., purification of active phosphatase in dog faeces, A., 1279.
King, E. J., and Harris, R. I., phosphatase in obstructive jaundice, A., 516.
See also King, E. J.
- Armstrong, C. See Greenberg, B. E.
- Armstrong, (Miss) C. B. See Davis, T. L.
- Armstrong, E. J., shroekingierite from Bedford, New York, A., 323.
- Armstrong, G., and Butler, J. A. V., anodic passivation of gold in chloride solutions, A., 39.
- Armstrong, J. E., magneto-resistance of liquid sodium-potassium alloy, A., 566.
- Armstrong, M. R. See MacLeod, F. L.
- Armstrong, P. A. E., ferrous alloy [nickel-chromium steel], (P.), B., 106. Corrosion-resistant ferrous alloy comprising chromium, nickel, manganese, and copper, (P.), B., 907.
- Armstrong Cork Co. See Jordan, H. H., and Miller, A. B.
- Armstrong-Siddleley Motors, Ltd., High Duty Alloys, Ltd., Devereux, W. C., and Oliver, C. S., treatment of non-ferrous alloy castings, (P.), B., 956.
- Arndt, F., and Eistert, B., electronic theory of organic chemical reactions, A., 324. Conversion of carboxylic acids into higher homologues or their derivatives, A., 342. Tautomerism of the system thiocumarindiol-thiochromenediol and of ascorbic acid, A., 1248.
- Martin, G. T. O., and Partington, J. R., dielectric polarisation. XII. Dipole moments and structure of thiopyrones and related compounds, A., 809.
- and Rose, J. D., relations between acidity and tautomerism. III. The nitro-group and the nitronic esters, A., 334.
- Arndt, H. See Bauer, O.
- Arness, W. B., and Alloy Res. Corp., rustless iron, (P.), B., 637. [Iron] alloys, (P.), B., 637.
- Arni, H., plant-phosphatides, A., 1434.
- Arnim, K. von. See Grassmann, W.
- Arnold, C. L., Lowy, A., and Thiessen, R., isolation and study of humic acids from peat, B., 533.
- Arnold, F. See Diemair, W.
- Arnold, Frédéric. See Sartory, A.
- Arnold, F. W., jun., and Chandless, G. C., α -propylarsinic acid as a reagent for determination of zirconium, A., 319.
- Arnold, G. D., apparatus for dehydration, (P.), B., 1073. Process of dehydration, (P.), B., 1073.
- Arnold, H. R. See Du Pont de Nemours & Co., E. I.
- Arnold, L., colorimetric determination of blood-sugar by the Creceleus-Serfert method, A., 104.
- Arnold, L. E., herbicides for dandelions, B., 1012.
- Arnold, M. H. M. See Bell, R. P.
- Arnold, P. T. D. See Becker, R. B., and Neal, W. M.
- Arnold, R. N. See Lea, F. C.
- Arnold, S. See Arnold, T.
- Arnold, T., and Arnold, S., rubber compositions, (P.), B., 279.
- Arnold, T. I. See Klinov, I. J.
- Arnold, W. A. See Oster, R. H.
- Arnold, W. P., jun., and Sinclair Refining Co., coking of heavy oils, (P.), B., 1035.
- Arnolt, R. I. See Reti, L.
- Arnot, F. L., and Baines, G. O., elastic and inelastic cross-sections of the mercury atom, A., 1294.
and Milligan, J. C., formation of mercury molecules, A., 917.
- Arnow, L. E., physico-chemical effects of irradiation of crystalline ovalbumin solutions with α -particles, A., 1022.
- Arnulf, A. J., and Bonneau, P. E., [optical apparatus for] photography or cinematography in colours, (P.), B., 47.
- Aron, A., magnetic properties of thin films of nickel, A., 287.
- Aron, M., technique for showing the presence of a principle acting on the adrenal cortex in urine of cancer, A., 381. Gonadostimulin in urine of cancer, A., 381.
- Aron, Z. A. See Vosnessenski, S. A.
- Aronov, S. G., and Chvat, M. B., interaction between hydrogen sulphide and sulphur dioxide for recovery of elementary sulphur, B., 990.
and Kopeliovitch, I. A., carbonisation of Transcaucasian coals, B., 979.
- Aronovitch, M., properties of Bessemer steel prepared by Tochinski's method, B., 676.
- Aronovsky, S. I., and Gortner, R. A., cooking process. VIII. Volatile organic acids [produced] by saponification of aspen wood, B., 587.
- Aronson, J. D. See Seibert, F. B.
- Arpi, E., fracture test as used for tool steel in Sweden, B., 549.
- Arpin, J. B., and Fitch, F. B., waterproof match, (P.), B., 383.
- Arragon, G., methylation of sorbose and of its acetyl derivatives by Fischer's method, A., 200.
- Arrhenius, O., phosphate content of Swedish soils, B., 965.
- Arrias, (Mlle.) E. See Böeseken, J.
- Arrillaga, F. C., and Taquini, A. C., cyanosis from compressions of the mediastinum, A., 381.
- Arrington, L. B., and Shive, J. W., rate of absorption of ammonium- and nitrate-nitrogen from culture solutions by ten-day-old tomato seedlings at two pH levels, A., 1037.
- Wadleigh, C. H., and Shive, J. W., determination of carbon dioxide in culture solutions, A., 1044.
- Arschinov, V. V., methods of petrographic investigation, A., 1100.
- Arseniev, A. See Solun, A.
- Arseniev, A. N., photo-electric conductivity in silver chloride, A., 147.
and Kurtshatov, B. V., electrical conductivity of semiconductors. II. Electrical and optical properties of vanadium pentoxide crystals, A., 1310.
- Artamonov, N. S., determination of sulphuric acid in aerosols by electro-filtration methods, A., 53.
- Artemeva, O. A. See Gabrieliantz, S. M.
- Arthur, J. M., and Stewart, W. D., relative growth and dry-weight production of plant tissue under Mazda, noon, sodium, and mercury-vapour lamps, B., 867.
See also Way, K.
- Artom, C., Cioglia, L., and Tore, D., follicular hormone and blood-cholesterol, A., 667.
- Artschakova, T. A. See Babaeva, A. V.
- Arveson, M. H. See Standard Oil Co.
- Arvin, J. A. See Du Pont de Nemours & Co., E. I.
- Arzibischev, S. A., Milkovskaja, L. B., and Savostjanova, M. V., influence of irradiation on formation and decomposition of colloidal sodium in rock-salt, A., 311.
and Parfanovitch, U. A., electrolysis of copper into rock-salt, A., 39.
and Torporec, A., nature of the red layer formed at the border of the coloured zone in alkali halide crystals, A., 280.
- Arzimovitch, L., Kurtshatov, I. V., Migovskii, L., and Palibin, P., capture of slow neutrons by a nucleus, A., 1049.
and Palibin, P., lower limit of the nuclear photo-effect in beryllium, A., 1186.
- Asada, T., effect of adrenaline on blood-sugar and lactic acid, A., 1173.
- Asahina, T., and Nara, G., benzyl ethers of polysaccharides. I. Benzyl ethers of starches of various origins, A., 331.
and Yokoyama, K., mutual solubility of flavone and its derivatives, A., 817.
- Asahina, Y., and Akagi, H., lichen substances. LII. Methanolysis of lichen depesides and synthesis of divaric acid, A., 977.
and Fuzikawa, F., lichen substances. XLIV. Salazinic and norstictic acid. XLV. Identity of coecelic acid with barbatric acid. L. Components of *Parmelia perlata*, Ach. LI. Occurrence of norstictic acid in *Parmelia acetabulum*, Ach. LV. Endocrocin, a new hydroxyanthraquinone derivative, A., 83, 749, 905, 1238.
- and Hiraiwa, M., lichen substances. LVII. New depside (anziaic) acid and the components of *Anzia* types. LVIII. Components of *Thamnolia vernicularis*, Schaer, var. *Faurica*, Schaer, A., 1366.
- and Ishidate, M., configuration of borneo and isoborneol, A., 625. Two new transformation products of camphor in the animal organism, A., 865.
- Ishidate, M., and Momose, T., tere-santallic acid and isoter-santallic acid, A., 350. Müller's lactone from hydrochloroter-santallic acid, A., 618.
- and Nogami, H., lichen substances. XLVII. and LIV. Constitution of physodic acid. II. and III., A., 490, 1234.
- and Nomomura, S., lichen substances. LVI. Constitution of lobaric acid. I., A., 1366.
- and Yanagita, M., lichen substances. XLVI. Stictic acid. II., A., 213.
- and Yasue, M., lichen substances. XLIX. Synthesis of methyl sekikoate dimethyl ether. LIII. Synthesis of hydroxydivaric acid and of sekikaic acid, A., 490, 977.

- Ashina, Y. See also Tamura, K., and Zahlbruckner, A.
- Asai, C., photo-electric conductive substances. III. Spectroscopic studies on the photo-electric conductive thallium cell. IV. Filters for the thallium cell, A., 722. Photosensitive layers of the photo-electric conductive thallium cell, A., 1447.
- Asai, T., classification of acetic acid bacteria and oxidising bacteria isolated from fruits. I., A., 255.
See also Takahashi, T.
- Asano, M., and Azumi, T., constituents of *Nephromopsis stracheyi* f. *ectocarpisma*, Hue. I., A., 863. Components of Iceland moss. V. Reduction of dihydroprotolichestic acid and of lichestic acid, A., 864.
and Kameda, Y., lichen pigments of the pulvinic acid series. III. Reduction of pinastic acid and vulpinic acid. IV. Constitution of calycin and its synthesis, A., 1238.
and Ohta, Z., norcaperatic acid and agaric acid, A., 65.
- Asao, T., active principle of liver extract in recovery from anemia due to bleeding, A., 236.
- Asato, J., grain refinement of alloys by peritectic reactions, B., 191.
- Asbury, C. E. See Pentzer, W. T.
- Asbury, W. C. See Standard-I.G. Co.
- Asch, A. B. See Laughlin, W. C.
- Aschan, O., distillation and extraction of peat, B., 483.
- Aschehoug, V., vitamin-C content of tomato purée, B., 747.
- Aschenbrenner, J. See Fischer, Hans.
- Aschkinazi, J. B., preparation of 2-nitro-*p*-cresol from *p*-toluidine, B., 56.
and Rabinovitch, M. S., reduction of 3-nitro- to 3-amino-*p*-cresol, B., 296.
- Ash, E. J. See Saeger, C. M., jun.
- Ashbel, R., action of thyroid extract on respiration of tissues of invertebrates, A., 539.
- Ashburn, H. V., Collett, A. R., and Lazzell, C. L., β -alkoxyethyl *p*-aminobenzoates, A., 1494.
- Ashby, C. T. See Felsing, W. A.
- Ashby, E. See Emmett, H. E. G.
- Asher, A. L., and Meyer, W. G., uniformly coloured cement, (P.), B., 409.
- Asher, D. E. See Shelling, D. H.
- Asher, H. H., hardness study of transformations in gold-copper alloys, A., 693.
- Ashford, C. A., glycolysis in brain tissue, A., 402.
and Dixon, K. C., effect of potassium on glycolysis of brain tissue with reference to the Pasteur effect, A., 251.
- Ashley, K. D., Hansen, W. C., and Amer. Cyanamid Co., controlling the crystal size [of gypsum in decomposing phosphate rock], (P.), B., 899.
See also Romieux, C. J.
- Ashley, M. F., band spectrum of the H^2H^2 molecule, A., 1.
See also Lewis, G. N.
- Ashman, G. W., determining exterior house paint durability, B., 238.
- Ashmore, Benson, Pease & Co., Ltd., Rambush, N. E., and Andrews, P. A., jacketed vessels, particularly steam-jacketed boiling pans, (P.), B., 130.
- Ashton, E. See Horn, R. W. P.
- Ashton, W. H., dispersions, (P.), B., 930.
- Ashworth, D. I., and De Laval Separator Co., recovering solvent from sludge, (P.), B., 51.
- Ashworth, D. R. See Chattaway, F. D.
- Ashworth, U. S., growth and development, with special reference to domestic animals. XXXVI. Endogenous nitrogen and basal energy relationships during growth, A., 1528.
See also Brody, S.
- Asiatic Petroleum Co., Ltd., and Joyce, J. R., apparatus for analysing gases, (P.), B., 978.
- Asinger, F., hydrolysis of substituted benzanilides, A., 969.
- Askew, F. A., surface films of vitamin-E concentrates, A., 418. Absorption spectra of polycyclic hydrocarbons. I. Alkyl-substituted phenanthrenes. II. Partly reduced derivatives of phenanthrene, etc., A., 680.
See also Adam, N. K.
- Askew, H. O., boron status of fruit and leaves in relation to "internal cork" of apples in the Nelson district, A., 1436. Changes in the chemical composition of developing apples, A., 1548. Soil phosphates. I. Solubility of soil phosphate and fixation of added phosphate at varying pH values. II. Fixation of phosphate by P_2O_5 oxides in sodium- and calcium-clays, B., 688, 741.
- Askey, P. J., and Doble, S. M., activation of fuels by sodium carbonate. I., B., 884.
- Askinasi, D. L., and Kheifetz, D. M., iron and aluminium phosphates as sources of phosphorus for plants, B., 866.
- Askitopoulos, K. See Lange, W.
- Asling, W. L., and Dufford, R. T., efficiency of chemiluminescence accompanying the Wedekind reaction, A., 147.
- Asmundson, V. S., and Pinsky, P., effect of the thyroid on formation of hen's egg, A., 1285.
- Asmussen, R. W. See Christiansen, J. A.
- Aso, K., decomposition products of substances containing uronic acid, by heating in autoclave. I., A., 753. ω -Hydroxymethylfurfuraldehyde ether, A., 756.
- Asoda, Y., significance of the liver in metabolism of lipins. IV. Lipins in blood and bile in cases of oral administration of glucose to rabbits, A., 890. Influence of a calcium diet on disturbances of the liver function. I. Calcium diet and bilirubin metabolism. II. Calcium diet and the metabolism of urobilin substances, A., 1021.
- Aspelund, H., and Angustson, A. M., acetyldiphenylchloroacetylhydrazide, A., 211.
and Klingstedt, F. W., determination of furfuraldehyde number of pulp, B., 222.
- Asperen, van. See Böeseke, J.
- Aspinwall & Co., Ltd., production of coloured patterns on woven fabric [during weaving], (P.), B., 185.
- Asriel, E. See Lieben, F.
- Assarsson, G., calcium aluminate. IV. Properties of aluminium hydroxide crystallising from calcium aluminate solutions, A., 833.
- Assenhajm, D. See Dmochowski, A.
- Assheton, E., spirit varnishes, B., 1004.
- Assinovski, L. S., plant for production of ammonium sulphate from gypsum in Ukraine, B., 671.
- Assmann, K., tarnish-resisting films on silver, B., 459. Chromium-plating from chromic acid baths containing hydrofluoric acid, B., 460.
- Associated Appliances, Ltd., Deutsch, S., and Deutsch, H. R., smooth electroplated [steel] sheets, etc., (P.), B., 506.
- Associated Electrical Industries, Ltd. See Bancroft, F. E., Guy, H. L., and Juhlin, G. A.
- Associated Oil Co. See Lazar, A.
- Associated Silver Co. See Herring, G. E.
- Association of American Soap & Glycerine Products, Inc. See Hoover, K. H.
- Assoskov, P. J. See Snessarev, A. P.
- Assurex le "Roi des Verres de Sécurité" Magnien, Monnier, & Co., hardened or tempered glass plates, (P.), B., 950.
- Asta A.-G. Chemische Fabrik, and Koschara, W., 6:7-1:3'-4':5'-trialkoxypheylidialkoxiquinolines; [spasmolytics], (P.), B., 478.
- Astapenja, P. V., Gedroitz, A. I., and Zelkina, S. S., determination of vapours of paraffin and spindle oil in air, B., 710.
- Astbury, W. T., X-ray analysis of protein fibres, A., 162.
and Dickinson, S., α - β intramolecular transformation of myosin, A., 376. α - β transformation of muscle-protein *in situ*, A., 772.
- Dickinson, S., and Bailey, K., X-ray interpretation of denaturation and structure of the seed-globulins, A., 1433.
and Lomax, R., X-ray study of hydration and denaturation of proteins, A., 922.
- Preston, R. D., and Norman, A. G., X-ray examination of the effect of removing non-cellulosic constituents from vegetable fibres, A., 1451.
- and Sisson, W. A., X-ray studies of structures of hair, wool, and related fibres. III. Configuration of the keratin molecule and its orientation in the biological cell, A., 1195.
- Aster, E., natural resinous products. III.-V., B., 33, 160, 239.
- Astin, S., Moulds, L. de V., and Riley, H. L., selenium dioxide, a new oxidising agent. V. Some further oxidations, A., 1231.
- Aston, B. C., report of chemistry section, New Zealand, Dept. Agric., A., 1150. Misuse of lime with special reference to bushy lands, B., 39.
- Bruce, J. A., and Thompson, F. B., weed killers: thiocyanates, B., 567.
- Aston, F. W., masses of some light atoms determined by a new method, A., 677. Isotopes, A., 801, 1440. Isotopic constitution and at. wts. of hafnium, thorium, rhodium, titanium, zirconium, calcium, gallium, silver, nickel, cadmium, iron, and indium, A., 802.
- Aston, J. G., and Mayberry, M. G., nitroso-compounds. IV. Reaction of ethyl nitrite with isopropyl and cyclohexyl ketones, A., 1481.
and Menard, D. F., nitroso-compounds. III. Reactions of organo-metallic compounds with α -halogenonitroso-compounds, A., 1481.
- Willihnganz, E., and Messerly, G. H., heat capacities and entropies of organic compounds. I. Thermodynamic temperature scale in terms of the copper-constantan thermocouple from 12° to 273° abs., A., 1339.
See also Eidinoff, M. L., and Mayberry, M. G.

- Astrachantzev, P. I. See Semenov, V. M.
- Astruc, H., and Castel, A., determination of iron and copper in grape must and wine, B., 744.
- Astrup, T. See Fischer, Albert.
- Asundi, R. K., additional bands in band system of sulphur, A., 1. Band systems of calcium chloride, A., 9. Band systems and structure of CaCl_2 , A., 1051.
- and Partz, Y. P., emission bands of selenium, A., 907.
- Rao, C. M. B., and Samuel, R., absorption spectra of some organo-metallic compounds, A., 563.
- and Samuel, R., absorption spectra of chlorides and oxychlorides of sulphur in the vapour state, A., 680. Absorption spectrum of carbon disulphide, A., 913. Near ultra-violet absorption bands of SO_2 , A., 1188.
- Samuel, R., and Zaki-ud-Din, M., band systems of cadmium fluoride, A., 562.
- Aszodi, Z., sugar content of bile, A., 106.
- Atabekova, M. A., Gorbatscheva, I. N., and Lerkoev, I. I., Desensitising dyes. I. Synthesis of pinacryptol-yellow, B., 298.
- Atamantschnkov, G. D. See Sergaev, B. F.
- Atanasiu, I. A., and Babor, M., electrolytic deposition of cerium from anhydrous organic solvents, B., 730.
- and Velculescu, A. J., general system of bimetallic electrodes for potentiometric analysis, A., 952. Potentiometric determination of phosphate, A., 1337.
- Atarashi, K. See Lauer, K.
- Ateliers & Chantiers de la Manche, apparatus for dry separation of materials of different density, (P.), B., 210.
- Ateliers Neyret Beylier, apparatus for grinding, refining, and hydrating fibrous substances, (P.), B., 301. Gratory grinding or crushing machines, (P.), B., 929.
- Aten, A. H. W., jun., adsorption and ion exchange, A., 697. Additivity of the parachor, A., 1059.
- Athanasios, A., and Reinwein, H., oxalic acid metabolism, A., 386, 390.
- Athanasios, G., photovoltaic cells and photo-electric cells with an irreversible layer, A., 172.
- Athawale, D. Y. See Duke, J. A. H.
- Atkin, A. D., manufacture of a composition: [copper bearings], (P.), B., 680.
- Atkin, L. See Kirby, G. W.
- Athin, W. R., measurement of "acidity" of vegetable-tanned leather by the acetone method, B., 609.
- and Thompson, F. C., calculation of p_H values, A., 839.
- Atkins, F., classification of commercial vlang oils, B., 829.
- Atkins, W. R. G., determination of zinc in water by means of sodium diethylthiocarbamate, B., 752.
- See also Poole, H. H.
- Atkinson, F. E., and Strachan, C. C., cherry processing. I. and II., B., 331, 428.
- Atkinson, H. J., and McKibbin, R. R., Appalachians upland podsol soils. II. Organic matter-acidity relations, B., 242.
- See also Gray, P. H. H.
- Atkinson, J. D., corky-pit of apples, B., 691.
- Atkinson, N., synergic gas production by bacteria, A., 1167.
- Atkinson, R. D'E., energy and angular momentum in certain optical problems, A., 804.
- Atkinson, R. G., and Storch, H. H., lubricating oils from ethylene, B., 889.
- Atkinson, R. H. See Mond Nickel Co., Ltd.
- Atlantic Refining Co. See Chillas, R. B., jun., Ferris, S. W., Henderson, L. M., Lawrence, F. I. L., Malisoff, W. M., Myers, W. A., Perkins, I. M., Peterkin, A. G., jun., Quinn, T. W., and Weir, H. M.
- Atlas-Ago Akt.-Ges., and Münch, C., waterproof sheet abrasive material, (P.), B., 631.
- Atlas Powder Co. See Bucy, E. H., Hill, R. L., Jessen, C. C., and Sanders, M. T.
- Atmospheric Nitrogen Corporation, Kniskern, W. H., Lawrence, C. K., and Rohner, L. V., [mixed] fertilisers, (P.), B., 248.
- See also Brown, R. L., Davis, J. W., and De Rewal, F. J., and Fogler, M. F.
- Atroschtschenko, V. I., velocity of oxidation of ammonia at a platinum gauze, A., 941.
- Atsuki, K., and Kagawa, I., dialyser for alkali waste liquor [from mercerising baths], B., 19. Heat of acetylation of cellulose, B., 666.
- Kagawa, I., and Inoue, S., cellulose ethers. IV. Solubility of benzylcellulose. V. Solvent composition of benzylcellulose lacquer, B., 265.
- Kagawa, I., and Takata, Kunihiisa, cellulose ethers. III. Benzylating temperature of cellulose. VI. Cellulose material for benzylcellulose and materials for apparatus, B., 265, 299.
- Atterer, M. See Schmidt, Erich.
- Atwell, H. V. See Standard Oil Co.
- Atwood, F. C., mica—a new inert reinforcing material [for paints], B., 814.
- Atwood Vacuum Machine Co. See Johnson, G. H.
- Anbanel, J. E., and Alabaster, G. H., compositions for use as insulation for heat and sound, (P.), B., 497. Insulation for heat, cold, and sound, (P.), B., 903.
- Anbel, E., and Egami, F., anaerobic production of pyruvic acid from alanine, A., 1282.
- and Simon, E., existence of two types of lactic fermentation in dog's muscle, A., 110. Formation of pyruvic acid from lactic acid in muscle, A., 240.
- and Soeters, K., growth of *B. coli* on alanine, A., 1169.
- Anbel, R. rin. See Hitchen, C. S.
- Aubert, J. See Travers, A.
- Aubert, M., Clerget, P., and Duchêne, R., combustion of gas oils and heavy oils, B., 614.
- and Duchêne, R., knocking properties of isomeric fuels, B., 614.
- Aubertin, E., and Castagnon, R., hypoglycæmic action of insulin on the same dogs before and after depancreatisation, A., 666.
- Aubry, P. See Hamel, J.
- Auchinachie, D. W., and Emslie, A. R. G., significance of phosphatase determinations in the adult fowl, A., 243.
- Auchy, C. See Boeseken, J.
- Auden, H. A., and Standing, H. P., coating compositions, (P.), B., 861.
- See also Distillers Co.
- Audibert, E., and Delmas, L., rapid deflagration and double detonation of explosives, B., 607.
- Audibert, E., and Raineau, A., construction of cylindrical pressure containers, B., 289.
- Audidier, H. See Taboury, M. F.
- Andoynand, M. See Fehre, W.
- Audrieth, L. F. See Reed, J. B., and Ulich, H.
- Audry, P. See Meunier, L.
- Audubert, R., photolysis of water and action of light in electrodes, A., 46. Sensitivity of photon counters, A., 722.
- and Reithmuller, C., spectral sensitivity of photo-electric counters, A., 429.
- and Roulleau, J., mechanism of action of light on selenium electrolytic photo-cells, A., 178.
- and Viktorin, O., emission of radiation in chemical and biological phenomena, A., 1035.
- Auer, H., susceptibility measurements of aluminium mixed crystals, A., 154.
- Riedl, E., and Seemann, H. J., magnetic, electric, and spectroscopic investigation of gold-silver alloys, A., 158.
- Auger, P., absorption of cosmic radiation, A., 560.
- and Ehrenfest, P., ultra-penetrating corpuscles of cosmic radiation, A., 278.
- Leprince-Ringnet, L., and Ehrenfest, P., absorption of the soft fraction of corpuscular cosmic rays, A., 1050.
- and Rosenberg, A., secondary effects of cosmic rays, A., 426.
- Rosenberg, A., and Bertein, F., characteristics of the two corpuscular components of cosmic radiation, A., 560.
- Aughy, W. H., and Lansing, W. D., monochromatic filter, A., 188.
- Augusti, S., colour reaction of the magnesium cation, A., 54. Micro-colour reaction of the manganese cation, A., 55. Micro-colour reaction of chromium, A., 319. Behaviour of mercuriammonium compounds with potassium cyanide, A., 714. Microchemical detection of iodine, A., 836. *p*-Aminophenol hydrochloride as reagent for copper and iron cations, A., 837. Mercuriammonium chromate, A., 1089. Elimination of phosphoric, oxalic, fluoride, silicate, and silicofluoride ions in group III, A., 1472. Determination of mercury, A., 1474. Systematic microchemical recognition of mineral pigments. I. White pigments. II. Blue and green pigments, B., 319, 815.
- Augustson, A. M. See Aspelund, H.
- Ault, R. G., Haworth, W. N., and Hirst, E. L., constitution of ascorbic acid; action of sodium hypochlorite on α -methoxy-acid amides, A., 72. Preparation of *d*-mannuronic acid and its derivatives, A., 732. Acetone derivatives of methylglycosides, A., 1108.
- Ault, W. C., and Brown, J. B., arachidonic acid and its quantitative determination, A., 195. Fatty acids of phosphatides of ox adrenals, A., 233.
- Ault & Wiborg Corporation. See Corbin, M. H.
- Aumonier, F. S., determination of ethyl and methyl alcohols in natural essential oils, B., 1023.
- Anmüller, W., Schicke, W., and Wedekind, E., oxidation of oleonic and acetyloleonic acid, A., 865.
- Aunis, G. See Muraour, H.
- Aurischio, G., and De Nito, G., cure of hydrocyanic acid poisoning by sodium tetrathionate, A., 1276.
- Austenal Laboratories, Inc. See Prange, C. H.

- Austerweil, G., zeolitic purification of sugar juices, B., 518.
- Austin, A. O., and Ohio Brass Co., centrifugal machine, (P.), B., 210.
- Austin, C. R., effect of water vapour on surface decarburisation of steel by hydrogen with certain developments in gas purification, B., 151. Heat treatment in controlled atmospheres, including gaseous carburising, B., 633.
- and Gier, J. R., comparison of creep of metals, using a modified Rohn test, B., 729.
- See also Everhart, J. O.
- Austin, G. T., simple laboratory stirrer for use on vacuum line, A., 840.
- Austin, J., and Boddingtons' Breweries, filtration of liquids, (P.), B., 84.
- Austin, James B., physics and chemistry of firing ceramic ware, B., 630. Dependence of rates of austenite transformation on temperature, B., 1145.
- and Pierce, R. H. H., jun., determination of refractive index of vitreous silica and calibration of silica refraction thermometers between 18° and -200°, A., 1310. Reliability of measurements of thermal conductivity of refractory brick, B., 406. Linear thermal expansion and transformation phenomena in low-carbon iron-chromium alloys, B., 1145.
- See also Sosman, R. B.
- Austin, John B., and Una Welding, Inc., [coated] welding rod, (P.), B., 315. Welding electrode [for steel], (P.), B., 1053.
- Austin, M. D., Jary, S. G., and Martin, Hubert, ovidical action of winter washes, B., 423, 869. Control of the common green capsid bug, with special reference to the use of tar-petroleum oil winter washes, B., 472. Bordeaux mixture-nicotine combinations against *Aphis* and apple scab, B., 869.
- See also Jary, S. G.
- Austin, R. J., See Bedford, M. H.
- Austin, S., effects of exfoliation on plant metabolism, A., 1288.
- Austin, W. S., See Carl, B. E.
- Anten, J. T., calcium and magnesium losses from cultivation of forest land, B., 372.
- Auto Comfort Products Co. See Florich, J. F.
- Anto-Klean Strainers, Ltd., Beldam, W. R., and English, L. W., straining apparatus, (P.), B., 532.
- Auto Research Corporation. See Bijur, J.
- Automotive Products Co., Ltd., and Smith, W. P., compositions for fluid transmission of power, (P.), B., 657.
- Anvil, H. S., See Davis, J. D.
- Anwers, O. von, spectrochemistry of organic fluorine compounds, A., 1056. Physical constants and configuration of the stereoisomeric isoeugenols, A., 1120. Refraction equivalents of the triple carbon linking, A., 1222.
- and Breyhan, T., alkylation and acylation of pyrazoles, A., 1330.
- and Hugel, R., chlorinated cinnamaldioximes and cinnamonitriles, A., 1238. Chlorinated benzylideneacetophenones and hydriindones, A., 1363.
- and Ungemach, O., possibility of rupture of the carbon chain in derivatives of succinic acid, A., 474.
- and Wnnderling, H., oxidation of benzophenoxime, A., 930.
- Auwers, O. von, Hall effect of cuprous oxide, A., 287.
- and Neumann, Hans, iron-nickel-copper alloys of high initial permeability, A., 926.
- Avakova, E. S., See Rabinovitsch, A. M., and Shile, V. I.
- Avaljani, K., See Finkelstein, V. S.
- Avdalian, D. K., thermal study of the reactions between the components of the lime-soda-bauxite mixture in production of aluminium, B., 354.
- Avdeeva, A. V., See Kamzolkin, V. P., and Karshavin, V. A.
- Avdonin, N. S., influence of manuring on sugar formation in chicory, B., 38.
- Averkiew, N. D., See Usatenko, J. I.
- Averseng, J., See Sendrail, M.
- Avery, B. F., Kerr, S. E., and Ghantus, M., lactic acid content of mammalian brain, A., 1264.
- Avery, S., and McGrew, F. C., isomeric α -cyano- β -phenyl- α -methylglutaric acids and their derivatives, A., 490.
- Avgustinik, A. N., and Smirnov, D. I., rapid vacuum method for determining porosity, B., 433.
- Avic, R., determination of ash [in raw sugars] electrometrically (using the "salometer"), B., 474. Milling extraction: control by juice-density curves, B., 1062.
- Avtonomova, E. S., and Stessel, T. A., counting bacteria in suspension by means of a photo-cell, A., 126.
- See also Andreev, N. N.
- Awad, A. I., See Hnme, W. F.
- Awbery, J. H., formule and equations in nuclear chemistry, A., 277.
- Awe, W., See Feist, K.
- Axelrod, A., milk products, (P.), B., 827.
- Axmacher, F., inactivation of zymase or carboxylase by diazomethane, A., 897.
- Ayabe, S., heat regenerators for coke ovens, B., 932.
- Ayers, J. W., black oxide of iron [for pigments], (P.), B., 1092.
- and Williams & Co., C. K., [iron oxide] pigments, (P.), B., 367.
- Ayl, S., change in manurial value of superphosphate after application to soil, B., 244.
- Ayliffe, S. H., See Wood, R. G.
- Ayling, E. E., See Hinkel, L. E.
- Aylward, F. X., Channon, H. J., and Wilkinson, H., liver and fat metabolism, A., 390.
- Aynsley, E. E., Pearson, T. G., and Robinson, P. L., kinetics of the reaction between hydrogen and sulphur. I. Reaction at 265-350° and 290-820 mm., A., 307.
- and Robinson, P. L., kinetics of the reaction between hydrogen and sulphur. II. 1. Formation and characteristics of the unimolecular layer of hydrogen sulphide on the glass surface. 2. Independence of the reaction of the presence of oxygen, moisture, and sulphur dioxide, A., 586. Sulphur, B., 671.
- Ayres, A., phosphate fixation in Hawaiian soils, B., 72.
- Ayyar, C. V. R., See Viswanath, R. B. B.
- Ayyar, N. K., See Iyer, A. V.
- Ayyar, P. R., and Patwardhan, V. A., fixed oil from seeds of *Amoora rohituka* (W. and A.), B., 814.
- Azarch, F. A., See Nisnivitsch, E. A.
- Azarch, Z. I., See Alexeevski, E. V.
- Azérad, E., See Baudouin, A.
- Azami, T., See Asano, M.
- Azzarello, E., Accardo, A., and Scalzi, A., galvanisation and rapid methods for determining zinc in galvanised iron, B., 26.

B.

B., T. M., seasonal variations in the composition of ewe's milk, A., 379.

B.M.P. Co., Inc. See Briscoe, W. D.

Baader, A., does pressure promote rusting of iron? B., 633. Behaviour of automobile lubricating oils at low temperatures, B., 889.

Baak, J. van, and N.V. Bataviasche Volks- & Stadsapotheek, powdered insecticides, (P.), B., 823.

Baas-Becking, L. G. M., and Koning, (Miss) H. C., chlorophyll spectrum, A., 145.

Baba, A., See Hatta, S.

Baba, Tamezi, precipitation of sugars with methyl-alcoholic barium hydroxide, A., 329. Decomposition of hexose diphosphate by an enzyme of tobacco leaves, A., 403.

Baba, Toshitomo, See Ishikawa, T.

Babaeva, A. V., and Artschakova, T. A., solubility of potassium fluorotantalate in aqueous hydrogen fluoride, A., 928. Equilibria in the system $\text{NiCl}_2\text{-H}_2\text{O-HCl}$, A., 935.

Babasian, V. S., bromonitrothiophen, A., 1504.

Babbitt, H. E., digestion of garbage in a sewage-treatment plant, B., 1071.

Schlenz, H. E., and Illinois University, sludge digestion, (P.), B., 1120.

Babbitt, J. D., See Mendelssohn, K.

Babcock, C. L., viscosity and electrical conductivity of molten glasses, B., 149.

and Hoffacker, J. V., visco-conductimeter, A., 189.

See also Lark-Horovitz, K.

Babcock & Wilcox, Ltd., porous heat-insulating body [building block], (P.), B., 188. Pulverising mills, (P.), B., 482. Welding [rod for ferrous metals], (P.), B., 556. Burning of wet [refuse] material, etc., (P.), B., 576.

and Shellenberger, R., [floors of slag-tap boiler] furnaces, (P.), B., 1027.

See also Bailey, E. G., Ebbets, G. D., Jacobus, D. S., Kerr, H. J., Lucke, C. E., and Norton, C. L.

Babers, F. H., See Goebel, W. F.

Babicheva, O. A., See Tinkov, D. M.

Babitsch, S., determination of cacodylates, A., 851. Volumetric determination of sodium glycerophosphate: calcium glycerophosphate, A., 1105.

Babkin, B. P., modes of stimulation of gastric secretion, A., 234.

Babkin, M., microchemical determination of the Hübl iodine value, B., 1150.

Babko, A., conditions of titration of silico-fluorides, and their application to determination of silica in silicates, A., 1215.

Babo, K. C., See McCleary, F. E.

Babor, M., See Atanasiu, I. A.

Babsky, M., effect of nitrogen on high-chromium steels, B., 677. Rapid determination of oxides in liquid steel, B., 854.

Babun, V., See Berkman, Y. P.

Bac, S., and Swietochowski, B., influence of water relationships of a low-ground peat terrain on biochemical phenomena and crop yield, B., 115.



- Baccaredda, *M.* See Natta, *G.*
- Bach, *D.*, use of developed mycelia in study of physiology of moulds, *A.*, 406.
- Bach, *F.*, Bonhoeffer, *K. F.*, and Moelwyn-Hughes, *E. A.*, reaction of heavy hydrogen with bromine vapour, *A.*, 39.
- Bach, *H.* See Helferich, *B.*, and Weissberger, *A.*
- Bach, *N.*, new electrocapillary effect, *A.*, 698.
- Bachalard, catalytic oxidation of sulphur dioxide, *B.*, 1141.
- Bacharach, *A. L.*, optical methods in food technology, *B.*, 172.
- and Glynn, *H. E.*, determination of ascorbic acid, *A.*, 1483.
- Bachem, *C.*, and Hiedemann, *E.*, optical measurements of ultrasonic wave velocities in liquids, *A.*, 690.
- See also Falkenhagen, *H.*
- Bacher, *R. F.*, and Goudsmit, *S.*, atomic energy relations. I, *A.*, 143.
- and Sawyer, *R. A.*, isotope shift in Mg I, *A.*, 799.
- Bachhwat, *S.* See Mitter, *P. C.*
- Bachler, *F. R.*, determination of sucrose in beet (using Sachs-le Docte method), *B.*, 76.
- Bachman, *C.*, anti-gonadotropic sera, *A.*, 1395.
- Collip, *J. B.*, and Selye, *H.*, anti-gonadotropic substances, *A.*, 791.
- Bachman, *G. B.*, reaction of ethylene oxide with acetylenic Grignard reagents, *A.*, 470. Manometric manostat, *A.*, 840. Reactions of bromo- and dibromolefines, *A.*, 958.
- and Hill, *A. J.*, acetylenes. I. Preparation of Δ^2 -heptene by dehalogenation methods, *A.*, 193.
- See also Alberts, *A. A.*, Farrell, *J. K.*, and Miller, *H. F.*
- Bachmann, *W. E.*, phenanthrene derivatives. II. Benzoylphenanthrenes and derivatives, *A.*, 622. Cleavage of unsymmetrical ketones by potassium hydroxide. I, *A.*, 751. Synthesis of 1:2-cyclopentenophenanthrene and related compounds, *A.*, 1117.
- and Chu, *J. H.*, pinacol-pinacolone rearrangement. VII. Rearrangement of 9:10-diaryldihydrophenanthrenediols, *A.*, 973.
- and Pence, *L. H.*, phenanthrene derivatives. III. *o*-Toluoyl- and β -methyl-naphthoyl-phenanthrene, *A.*, 980.
- Bachmetev, *E.*, X-ray determination of the FeAl structure, *A.*, 285.
- Bachmutova, *M. K.*, volumetric determination of aluminium in solutions, *A.*, 1338.
- Bachrach, *D. J.*, naphthenic acid soaps, *B.*, 31.
- Bachrach, *R. L.*, synthesis of perfumes. I. Preparation of the methylene ester of pyrocatechol. II. Preparation of dichloromethane, *B.*, 1165.
- Bachromejev, *I. R.*, and Pavlova, *L.*, physical chemistry of blood during narcosis, *A.*, 893.
- Bachtina, *E. F.* See Dragunov, *S. S.*
- Backeberg, *O. G.* See Stephen, *H.*
- Backer, *H. J.*, symmetrical esters of methanetetra-acetic acid, *A.*, 328. Tertiary pentanesulphonic acid, *A.*, 471. $\beta\beta'$ -Disulphodiethyl ether, *A.*, 472. Amides and *spiro*-cyclic imides of methanetetra-acetic acid, *A.*, 479. Sulphonation of mesitylene, *A.*, 967. Hexabromomethylbenzene and hexamethylbenzenhexasulphonic acid, *A.*, 1487.
- Backer, *H. J.*, and Beute, *A. E.*, β -chloroacrylic acids, *A.*, 473. α -Sulphoacrylic acid, *A.*, 476. β -Sulphocrotonic acid, *A.*, 961. The two β -sulphoacrylic acids, *A.*, 961. $\beta\beta'$ -Disulphopropionic acid, *A.*, 1106. $\beta\beta'$ -Disulphobutyric acid, *A.*, 1107.
- and Bolt, *C. C.*, halogenoalkylarsinic acids, *A.*, 333. Aliphatic diarsinic acids, *A.*, 333. Dissociation constants of some aliphatic arsinic acids, *A.*, 446. Thiacyclopentane 1:1-dioxides [tetramethylene sulphones], *A.*, 987.
- and Dam, *W. van*, simple alkaneseleninic acids, *A.*, 959.
- and Kramer, *J.*, radial esters of tetrathio-orthostannic acid. II, *A.*, 72.
- and Mulder, *H.*, acetylation of α -amino- and α -hydrazinosulphonic acids, *A.*, 71.
- Mulder, *H.*, and Froentjes, *W.*, addition of hydrogen sulphite to thiocarbimides, *A.*, 332.
- and Stienstra, *F.*, steric hindrance; *tert*-butyl chlorotriethio-ortho-silico- and -germano-formate, *A.*, 326. Radial esters of tetrathio-orthosilicic and tetrathio-orthogermanic acids, *A.*, 1111.
- and Strating, *J.*, cyclic selenones, *A.*, 100. Addition of sulphur dichloride to butadienes, *A.*, 325. Structure of cyclic sulphones derived from butadienes, *A.*, 497. Isomerides of the butadienesulphones, *A.*, 1105.
- Backès, *M.*, constitution of aldols, *A.*, 962.
- Backman, *A.*, determination of cellulose content of newspaper, *B.*, 541.
- Backman, *B. C.*, Hofmann, *W. T.*, and Patent & Licensing Corp., making felt, paper, etc., (P.), *B.*, 897.
- Backman, *E.*, rapid combined fixing and staining method for plant chromosome counts, *A.*, 1182.
- Backus, *H. S.* See Sage, *B. H.*
- Bacon, *E. F.* See Luckey, *G. P.*
- Bacon, *F. S.*, and Boston Blacking & Chem. Co., securing together pieces of stock [with nitrocellulose cement], (P.), *B.*, 281.
- Wedger, *W. H.*, and Boston Blacking & Chem. Co., manufacture of shoes and [nitrocellulose] adhesives, (P.), *B.*, 281.
- Bacon, *R. F.*, smelting sulphide ore, (P.), *B.*, 235.
- and Bencowitz, *L.*, recovery of sulphur, (P.), *B.*, 590.
- Bacq, *Z. M.*, occurrence of unstable choline esters in invertebrates, *A.*, 1157. Acetylcholine in the tissues of invertebrates, *A.*, 1522. Choline-esterase in invertebrates, *A.*, 1536.
- and Bovet, *D.*, action of derivatives of aminomethylbenzodioxan and aminomethylcoumaran on the nictating membrane of the cat, *A.*, 525.
- and Fredericq, *H.*, identification of the substance liberated in the nictating membrane of the cat by sympathetic stimulation, *A.*, 116. "Adrenolytic" action of a dioxan derivative (933F), *A.*, 245.
- and Mazza, *F.*, identification of acetylcholine extracted from the ganglionic cells of the octopus, *A.*, 1522.
- Baddeley, *G.*, and Kenner, *J.*, *m*-alkylation of aromatic hydrocarbons by the Friedel-Crafts reaction, *A.*, 612.
- Badenheuer, *F.*, construction and operation of large coreless induction furnaces [for steel], *B.*, 811.
- Bader, *H.*, decomposition of foodstuffs in presence of electrolytes, *B.*, 204.
- See also Morin, *H. G. S.*
- Bader, *M. J. G.*, azo-dyes, (P.), *B.*, 797. Compositions for production of azo-dyes, (P.), *B.*, 797.
- Badertscher, *A. E.*, and McCormick & Co., Inc., horticultural pyrethrum dust, (P.), *B.*, 74.
- and Wotherspoon, *R.*, derris and pyrethrum powders, *B.*, 517.
- Badger, *A. E.*, and Silverman, *W. B.*, modulus of elasticity of glass in relation to temperature, *B.*, 992.
- Badger, *F.*, and Brit. Maxium, Ltd., [mould with plug for] casting of magnesium and alloys mainly composed of magnesium, (P.), *B.*, 811.
- Badger, *R. M.*, moments of inertia and the shape of the ethylene molecule, *A.*, 1448.
- Badger & Sons, Co., *E. B.* See Campbell, *C. L.*, and Lunt, *G. P.*
- Badoche, *M.*, dissociable organic oxides; photo-oxidation of sodium 1:1':3'-triphenylrubene-3-carboxylate, *A.*, 618.
- See also Dufrasse, *C.*
- Badzynski, *S.*, adsorptive carbon from cellulosic raw material, *B.*, 340.
- Badzynski, *W.* See Wasilewski, *L.*
- Baechler, *R. H.*, corrosion of metal fastenings in wood treated with zinc chloride, *B.*, 104.
- Bäcker, *E.*, X-ray crystal scale, the absolute scale, and the electronic charge, *A.*, 272. Absolute wave-length of the aluminium $K\alpha_{1,2}$ line determined by the plane lattice method, *A.*, 424.
- Bähne, *H.*, and Melhose, *E.*, disinfectants, (P.), *B.*, 608.
- Bähr, *O.*, effect of fat content of herrings and similar fish on their preserving qualities, *B.*, 698.
- Baena, *V.*, influence of bone-marrow extract of normal and splenectomised animals on synthesis of haemoglobin, *A.*, 230. Influence of cortical hormone and ascorbic acid on chemistry of active muscle, *A.*, 239.
- Baens, *L.*, Yenko, *F. M.*, and West, *A. P.*, tannin content of Philippine barks and woods, *B.*, 469.
- See also Yenko, *F. M.*
- Baentsch, *S.* See Kühl, *Hugo.*
- Bär, *A. L. S.*, and Tendeloo, *H. J. C.*, variation in capacity for [ionic] exchange of colloidal clay. I and II, *A.*, 32, 930.
- Baer, *E.*, and Langer, *D.*, analysis of leather tanned with iron salts, *B.*, 916.
- Baer, *Erich.* See Fischer, *H. O. L.*
- Bär, *F.* See Kuhn, *R.*
- Bär, *R.*, velocity of sound in liquid oxygen, *A.*, 289.
- Bärenfänger, *C.*, corrosion of ships' hulls by lower sea fauna, *B.*, 635.
- Bärisch, *J.*, spectral distribution of, and effect of temperature on, the crystal photo-effect with single crystals of pyrrargyrite and stephanite, *A.*, 282.
- Baerlocher, *G.*, crystallising point of wax solutions, *B.*, 597.
- Baernstein, *M. A.*, use of barium compounds as fluxes, *B.*, 405.
- See also Fisher, *E. E.*
- Baert, *H.* See Chevallier, *A.*
- Baerts, *F.*, and Delvaux, *P.*, Dédéck-Vašátko process at Tirmont, *B.*, 200.
- Bärwald, *L.* See Hahn, *G.*
- Baessler, *E.* See Schiemann, *G.*

- Bäumert, P. A. F., and Elektrochem. Ges.m.b.H., phosphates containing citric acid- or citrate-soluble phosphoric acid compounds, (P.), B., 1142.
- Bäurle, A. See Täufel, K.
- Baev, A. A., ammonia formation and respiration in erythrocytes of birds, A., 229.
- Baeyens, J., physico-chemical composition and lime requirements of soils of Kisanu (Inkisi), B., 565.
- Baeyer, H. J. von, coincidence method for investigating nuclear processes, A., 1187.
- Baeyertz, M., chromium oxide inclusions in stainless steels and ferrochromium, B., 190.
- Baffle, P., compounds obtained by dehydration of the double iodide of lead and potassium $PbI_2 \cdot KI_2 \cdot 2H_2O$, A., 460.
- Bagchi, K. N. See Bose, A. C.
- Baggesgaard-Rasmussen, H., and Reimers, F., solubility of morphine in various solvents, A., 577. Determination of morphine. V. Methods of determination in opium, B., 1067.
- Baggs, A. E., and Littlefield, E., colorable ceramic composition and its utilisation, (P.), B., 101.
- Bagnall, D. J. T. See Tankard, A. R.
- Bahl, B. S. See Bhatnagar, S. S.
- Bahl, J. I., and Leichot, R. W., ceramic manufacture, (P.), B., 993.
- Bahl, R. K., and Partington, J. R., lower oxides and sulphates of iodine, A., 1334.
- See also Partington, J. R.
- Bahn, A. See Abderhalden, E.
- Bahnsen, K. See Bomskov, C.
- Bahr, T., electrochemical reduction of phenols, A., 338. Production of pure benzene hydrocarbons from phenols, B., 347.
- Bahr, G. M., soil fertility and bronzing of citrus [trees], B., 1011.
- Baicoiano, S. See Litarczek, G.
- Baidan, G. K., tanning with pine, oak, willow, and chestnut and their combinations in preparing sole leather, B., 114.
- and Shemoehkin, A., prepared picking band leather for shuttles of weaving machines by means of sulphur-vat vegetable tanning, B., 817.
- See also Izraelson, Z. I.
- Baier, H., and Deuts. Gold- & Silber-Scheideanstalt vorm. Roessler, bleaching [with non-aqueous liquors], (P.), B., 353.
- Baiersdorf, G., limits for spectroscopic detection of cadmium and palladium in silver, B., 552.
- Bailey, A. J., extractor using a solution of volatile and non-volatile phases, A., 724. Lignin in Douglas fir, B., 16. Internal structure of paper, B., 845.
- Bailey, B. E., seasonal variations in the vitamin-D potency of pilchard oil, A., 1036.
- Bailey, C. H. See Markley, M. C., Skovholt, O., and Steller, W. R.
- Bailey, C. R., and Thompson, J. W., infrared absorption spectrum of crystalline sodium nitrite, A., 806.
- See also Angus, W. R.
- Bailey, E. G., and Babcock & Wilcox, Ltd., high-temperature incinerator furnace, (P.), B., 656.
- Bailey, F. W. See Robertson, J. A.
- Bailey, G. H., [anti-pneumococcal] serum, (P.), B., 1166.
- Bailey, H. H., and Gill, J. F., [bristle] treatment of green clay, shale, or bricks, before burning, (P.), B., 228.
- Bailey, J. R. See Lackey, R. W.
- Bailey, K., cross-seed mucilage, A., 1549.
- See also Astbury, W. T.
- Bailey, K. C., thermal decomposition of hydrogen peroxide in presence of glass wool and copper sulphate, A., 455.
- Bailey, L. H., report of the Committee on testing rye flour, B., 1114.
- Capen, R. G., and LeClerc, J. A., composition and characteristics of soya beans, soya-bean flour, and soya-bean bread, B., 1115.
- and LeClerc, J. A., cake and cake-making ingredients, B., 697.
- Bailey, M. J., foaming of egg-white, B., 921.
- Bailey, V. A., and Healey, R. H., behaviour of electrons in chlorine, A., 677.
- Bailey, W. C., apparatus for dehydrating oil and water emulsions, (P.), B., 893.
- Bailey, W. F. See Adams, J.
- Bailey, W. T., taste and odour control [in water supply] at Council Bluffs, Ia., B., 527.
- Baillet d'Estivaux, L., intense development of the microbe of [wine] tourne in a very alcoholic medium, B., 780.
- Bailly, L. See Internat. Furnace Equipment Co.
- Bailly, O., and Gaumé, J., mechanism of hydrolysis of di-esters of orthophosphoric acid; migration of the phosphoric acid radical during hydrolysis of two mixed di-esters, methyl α - and β -glycerophosphate; interconversion of α - and β -glycerophosphates, A., 471.
- Bain, E. C. See Davenport, E. S.
- Bain, G. W., pyrite oxidation, A., 602.
- Bain, J. P. See Pollard, C. B.
- Bainbridge, K. T., mass of Be^9 and at. wt. of beryllium, A., 5. Measurement of masses of He and H^1 , Nc^{20} , Nc^{22} , B^{11} , Cl^{35} , and Cl^{37} with a mass spectrograph, A., 5. Isotopic constitutions of krypton, mercury, selenium, cadmium, and germanium, A., 6. Mass spectra of neon fractionated by G. Hertz and the non-existence of Nc^{23} , A., 6. Masses of lithium isotopes, A., 140. Equivalence of mass and energy, A., 143.
- Baines, G. O. See Arnot, F. L.
- Baines, H. See Murray, H. D.
- Baird, D. K., Haworth, W. N., and Hirst, E. L., polysaccharides. XX. Molecular size of amylose and the relationship between amylose and starch, A., 1226.
- Baird, F. D., and Greene, D. J., comparative vitamin-D requirements of growing chicks, turkeys, and pheasants, A., 1287.
- Baird, T. T., methylene-blue and acid fuchsin for subcutaneous tissue spreads, A., 378.
- Baird, W. See Imperial Chem. Industries.
- Baird, W. F., control of heat transfer [in refrigerators], (P.), B., 1074.
- Baisse, J. See Pien, J.
- Baitschikov, A. G., extraction of bromine from solutions by petroleum, B., 269.
- Bajdalakov, V. M., determination of humus content, B., 646. Properties of humus of various soil types, B., 646.
- Bajpai, M. P., Gawlior trap from Gwalior, India, A., 468. Alkaline quartz-dolerites, from Bijawar, and their chemical relationships, A., 1220.
- Bakelite Building Products Co., Inc., shingles, (P.), B., 309.
- Bakelite Corporation, coating compositions, (P.), B., 239. Coating of articles [with heat-resistant films], (P.), B., 914. Testing of thermo-setting plastic materials, (P.), B., 961.
- See also Bender, H. L., Bitterich, F., Cheetham, H. C., Courtney, R. P., Groff, F., Turkington, V. H., Upper, F. A., and Weith, G. S.
- Bakelite Ges.m.b.H. See Elbel, E., and Seebach, F.
- Baker, A. Z., and Wright, M. D., vitamin- B_1 content of foods, A., 1035.
- Baker, C. M., tolerances in [paper-mill] white-water losses, B., 1088.
- Baker, C. R. See Standard Oil Co.
- Baker, Drew. See Culbertson, J. B.
- Baker, E. B., and Boltz, H. A., improved absolute manometer for pressures from 0.001 micron to one atmosphere, A., 952.
- Baker, F. B., bread improver, (P.), B., 122.
- Baker, G. A., corrosion [in sulphite-pulp mills], B., 411.
- Baker, G. L., determination of jellying power of fruit-juice extractions, B., 251. Treatment of apple pomace for pectic extraction, B., 1020.
- and Kneeland, R. F., viscosity of apple pectin; effect of commercial diastatic enzymes at 40°, B., 605. Pectin content of raw material; optimum conditions of extraction determined by viscosity, B., 1162.
- See also Poe, C. F.
- Baker, G. O., and Vandecaveye, S. C., effect of fertilisers, soil type, and certain climatic factors on yield and composition of oats and vetch, B., 967.
- Baker, G. R. See Tunley, A. A.
- Baker, H., decomposition of sulphur compounds in coal gas, water-gas, producer gas, waste furnace gas, or other combustible power gas, or in by-products obtained in manufacture thereof, (P.), B., 583.
- Baker, H. C. See Rubber Producers Res. Assoc.
- Baker, H. L., and Samcoe Holding Corp., dyeing [of fabrics], (P.), B., 1091.
- Baker, J. C., Parker, H. K., and Freese, F. B., measurement of colour in flour and bread by means of Maxwell discs. II., B., 425.
- Schmelkes, F. C., and Wallace & Tiernan Products, sterilisation of water, (P.), B., 208.
- and Wallace & Tiernan Co., Inc., measuring and controlling apparatus [for water chlorination], (P.), B., 384.
- Baker, J. L., and Hulton, H. F. E., separation of products resulting from enzymic hydrolysis of starch, B., 1016.
- Baker, J. R., apparatus for measuring the drying power of the atmosphere, A., 1098.
- Baker, J. W., reactions of methyl $\Delta\beta$ -propene- $\alpha\beta$ -tricarboxylate; three-carbon ring-chain prototropy involving a simple cyclopropane ring, A., 475.
- and Nathan, W. S., mechanism of aromatic side-chain reactions with special reference to polar effects of substituents. III. Effect of unipolar substituents on critical energy and probability factors in interaction of benzyl bromide with pyridine and α -picoline in various solvents, A., 710.

- Baker, K. F., and Heald, F. D., control of blue-mould decay of apples, B., 826.
- Baker, L. C., constituents of meat acting as pointers of change, B., 571.
- Baker, M. D. See Scharles, F. H.
- Baker, R. F. See Morgan, H. E.
- Baker, T. P., and Dufaycolor, Ltd., colour photography, (P.), B., 206.
See also Dufaycolor, Ltd.
- Baker, W., condensation of pyrocatechol with acetone, A., 80. Attempts to synthesise 5:6-dihydroxyflavone (primetin), A., 220. New factor controlling chelations, with special reference to disubstitution in the resorcinol nucleus, A., 85.
- Jukes, E. H. T., and Subrahmaniam, C. A., derivatives of 1:2:3:4-tetrahydrobenzene. III. Synthesis of dill apiole, and extension of the Dakin reaction, A., 80.
- and Lothian, (Miss) O. M., chelation. II. Stabilisation of Kekulé forms in *o*-hydroxyacetophenones, A., 862.
- and Walker, James, reactions of *o*-hydroxybenzylacetone, A., 985.
- Baker, W. B., deterioration and stabilisation of aconite preparations. I., B., 79.
- Baker, W. N., and La Mer, V. K., conductance of potassium chloride and of hydrochloric-deuterochloric acid in H_2O-D_2O mixtures; viscosity of H_2O-D_2O , A., 1078.
See also La Mer, V. K.
- Baker, Z., and King, C. G., purification, specificity, and inhibition of liver-esterase, A., 534.
See also Elliott, K. A. C.
- Baker & Co., Inc., dental gold fillings, (P.), B., 1099. [Plant for] manufacture of glass, (P.), B., 1143. [Precious-metal] alloys for cast-metal dentures, (P.), B., 1148*.
- Baker Perkins Co., Inc. See Eggert, G. B., Schmierer, E., and Vollrath, H. B.
- Baker Perkins, Ltd. See Harber, L. S., and Tunley, A. A.
- Bakh, A. N. See Temkin, M.
- Bakhmetiev, E. F., X-ray determination of structure of $FeAl$, A., 433.
- Bakke, A. L., and Henson, E. R., relation of fungi to respiration and fermentation occurring in stored hay, B., 1061.
- Bakker, G., surface tension and tangential pressure in the capillary film in connexion with osmotic pressure in the film theory of Pockels, Langmuir, and Adam, A., 29.
- Bakker, H. A., colloid chemistry of chlorophyll, A., 165. Purification of chlorophyll, A., 421.
- Bakunin, M., and Vitale, E., molecular compounds in the systems acid-salt, anhydride-salt, acid-ester (acetic, butyric, phenylacetic acids), A., 1323.
- Balabaj, A. See Essin, O.
- Balaban, I. See Mihăilescu, C.
- Balaban, P. I. See Medinski, C. B.
- Balachowski, S., possibility of local vitamin deficiency, A., 903.
- Balamuth, L., elastic moduli of rock-salt, A., 154.
- Balandin, A. A., classification of catalytic reactions in organic chemistry. II. Method of finding a complete system of doublet reactions and calculations for the atoms H, C, N, O, S, Cl and the linkings from 0 to 4, A., 1348.
- Balandin, A. A., Eidus, J. T., and Zalogin, N. G., formation of butadiene and acetylene by action of the high-frequency discharge on ethylene, A., 192.
- and Juriev, J. K., kinetics of catalytic dehydrogenation of dimethylcyclohexane, A., 310.
- and Schujkin, N. I., kinetics of the catalytic dehydrogenation of methylcyclohexane with a nickel-aluminium oxide catalyst, A., 1086.
- See also Schujkin, N. I., and Turova, M. B.
- Balanesco, G., determination of zirconium with 8-hydroxyquinoline, A., 721.
- and Ionescu, V., determination of arsenic and phosphoric acids and iron in presence of one another, A., 1472.
- Balanesco, I., Zamfir, D., Ocriu, S., and Stanesco, I., general metabolism of nitrogenous substances in tuberculosis, A., 386.
- Balansard, J., marrubiin content of some *Labiata*, A., 268.
See also Mercier, F.
- Balarev, D., inner absorption in crystals of salts, A., 16. Peptisation of barium sulphate crystals, A., 445. Vapour pressure in a system with ground-up crystals, A., 447. Inner adsorption in salt crystals, A., 1316.
- [with Andreev, K., Zankova, E., and Damova, P.], transference of surface changes inside crystal systems. IV., A., 1069.
- [with Vrbanova, M., and Kolarov, N.], inner adsorption in salt crystals. I., A., 819.
- and Kolusheva, A., gypsum problem from the colloid chemical viewpoint, A., 591.
- Balashov, E. F. See Rakovski, V. E.
- Balashova, N. See Stepanov, D.
- Balashova, O. N., Lvova, V., Solovieva, E. M., and Scharpenak, A. E., amino-acid composition of important food-proteins. II. Method of determining the amino-acid composition of proteins. III. Amino-acid composition of meat-proteins (beef), A., 1014.
See also Scharpenak, A. E.
- Balasse, G., and Galet, (Mlle.), iodine spectra of feeble excitation, A., 424.
- Balatre, P., "free" ammonia in urine, A., 1267. Determination of uric acid in urine, A., 1268. Detection of bile-pigments in urine by methylene-blue, A., 1268.
- Balavoine, P., do egg-doughs decrease in lecithin-phosphate content in course of time? B., 570. Coloration of Dutch cheeses, B., 571. Use of crucibles with a porous filtering plate in Allihn's method, A., 599. Fountain waters of the canton of Geneva, B., 704.
- Balbi, G., and Marchesini, G., apparatus for determining inflammability of gaseous products evolved on heating [dried] paints and varnishes, B., 1151.
- Balboni, G., chemical analyses of the flesh and viscera of slaughterhouse animals, A., 1396.
- Balcar, F. R., and Air Reduction Co., Inc., luminescence [neon] tube, (P.), B., 275. Luminescence tube, (P.), B., 316.
- Balce, S., relation of volume shrinkage to heat of formation and electrolytic decomposition potential of the alkali and alkaline-earth metal halides, A., 303.
- Baleh, R. T. See Lauritzen, J. I.
- Bald, J. G., statistical aspects of production of primary lesions by plant viruses, A., 1043.
- Baldanzi, L. See Bellucci, I.
- Baldeschwieler, E. L., determination of sulphide-sulphur in alkaline solutions containing other sulphur compounds, A., 53.
- and Mikeska, L. A., preparation of platinum oxide catalyst from spent material, A., 941.
- Baldinger, L. H., continuous-reading titration apparatus, A., 466.
- Baldissera, L. See Francesconi, L.
- Baldraceo, F., determination of free sulphuric acid and sulphur in leather, B., 818.
- Baldraceo, G., decolorisation of sole leather: simple method of measurement, B., 645.
- Baldridge, C. W., relationship between oxygen consumption and nitrogen metabolism. IV., A., 112.
- Baldwin, A. T., and Hanson-Van Winkle-Munning Co., flux for galvanising, (P.), B., 999. Flux wash for galvanising, (P.), B., 999.
- Baldwin, A. W. See Imperial Chem. Industries.
- Baldwin, E., nitrogen catabolism in invertebrates. III. Arginase in the invertebrates; new method for its determination. IV. Synthesis of uric acid in *Helix pomatia*, A., 388, 1015.
- Baldwin, H. I., catalase activity as a measure of viability of tree seeds, A., 1179.
- Baldwin, J. T., treatment of oil gels, (P.), B., 735. Oxidised oil gel, (P.), B., 735. Hard-surface floor coverings and material therefor, (P.), B., 735. Oil-gel composition, (P.), B., 735.
- and Sandura Co., Inc., [zinc] pigments, (P.), B., 511.
- Baldwin, O. H., production and treatment of metal articles [tubular fittings for connecting pipes], (P.), B., 910.
- Baldwin, W. C. G., Wolfrom, M. L., and Lowry, T. M., rotatory dispersion of organic compounds. XXV. Open-chain derivatives of arabinose, fructose, and fucose; optical cancellation in penta-acetyl μ -fructose, A., 809.
See also Lowry, T. M.
- Baldwin, W. J., colour-stability in enamels, B., 1093.
- Bale, W. F., and Fray, W. W., analysis of dust samples employing X-ray diffraction, A., 317.
- Baleev, A. V. See Shraibman, S. S.
- Bales, C. E., and Christian, W. T., firing clay refractories with by-product coke-oven gas, B., 949.
- Balte, M. P., and Phillips, H., discoloration and staining of leather by iron impurities in vegetable tanning liquors, B., 197.
- Balin, G., and Mandelstam, S., refractive index of thallium vapour near the line λ 5350-46 Å., A., 431.
- Balinkin, I. A., and Wells, D. A., spectrum of rubidium in mercury arc, A., 1292.
- Bálint, P., pentose produced during chronic pentosuria, A., 106.
- Balk, R. See Barth, T. F. W.
- Balke, C. W., niobium and tantalum, B., 1146.
- Balks, R., and Rintelen, P., reaction changes in soils following physiologically acid and -alkaline manuring, B., 324.

- Ball, *O. C.*, kaolinite in Illinois coal, A., 725.
and Cady, *Gilbert H.*, evaluation of ash-correction formulae based on petrographic analyses of mineral matter in coal, B., 338.
- Ball, *J. A.*, and Technicolor Motion Picture Corporation, colour photography with key print, (P.), B., 925.
- Ball, *T. R.*, Allison magneto-optic apparatus, A., 722.
- Wulfkuehler, *W.*, and Wingard, *R. E.*, intermediate states of oxidation of stannous chloride, A., 1333.
- Ball, *W. C.* See Childs, *A. E.*
- Ballard, *S. S.*, nuclear moments of niobium from hyperfine structure, A., 2.
and White, *H. E.*, isotope effect in the Lyman series of hydrogen, A., 1.
See also Grace, *N. S.*
- Ballard, *W. E.* See Metallisation, Ltd.
- Ballarin, *G.* See Costantini, *A.*
- Ballou, *V.* See McLaughlin, *W. L.*, and Skow, *R. E.*
- Ballowitz, *K.*, and Meier, *R.*, decarboxylation of mesoxalic acid by glycer-aldehyde and methylglyoxal, A., 1106.
See also Meier, *R.*
- Balls, *A. K.*, and Hale, *W. S.*, peroxidase, A., 248. Peroxolysis in flours, B., 520. Peroxidase in darkening of apples, B., 604. Pineapple juice prevents discoloration of cut fruits, B., 1162.
- Swenson, *T. L.*, and Stuart, *L. S.*, assay of papain, B., 695.
- Balls, *W. L.* See Gracie, *D. S.*
- Bally, *O.*, formation of ice crystals, A., 686.
- Balog, *M.* See Rollett, *A.*
- Balozet, *L.*, action of ether, chloroform, sodium fluoride, phenol, and saponin on the virus of infectious anaemia, A., 899.
- Bals, *M.* See Litarczek, *G.*
- Balson, *E. W.* See Lawson, *A.*
- Băltăceanu, *G.*, Angelescu, *H.*, and Vasiliu, *C.*, influence of "octinum" on bile excretion, A., 116.
and Vasiliu, *C.*, histamine and the bile secretion, A., 648.
- Baltesanu, *I.* See Slatincanu, *A.*
- Balthasar, *K.*, magnesia unsoundness, B., 455.
- Baltimore Paint & Varnish Production Club, practical mill-dressing studies: determining factors controlling output and fineness of grind, B., 1.
- Baltzer, *F.* See Katsch, *G.*
- Baltzy, *R.* See Lamson, *P. D.*
- Baly, *E. C. C.*, kinetics of photosynthesis, A., 178, 794. Kinetics of heterogeneous catalysis and of enzyme action, A., 1084.
and Pepper, *W. P.*, adsorption of aluminium hydroxide by kieselguhr, A., 1070.
- Balz, *G.*, and Zinser, *W.*, thermal decomposition of metallic borofluoride amines, A., 313.
- Balzwinik, *A. M.* See Lewin, *F. B.*
- Bamann, *E.*, and Diederichs, *K.*, phosphatases. III. Separation of the two isodynamic phosphoesterases of animal organs by a selective inactivating process. V. Separation of accompanying esterase from liver-phosphoesterase active in the acidic region, A., 251, 402.
and Mukherjee, *Jatindra Nath*, fixation of enzymes by cells. I. Protoplasmic fixation of liver-esterase, A., 251.
Mukherjee, *Jatindra Nath*, and Vogel, *L.*, fixation of enzymes by cells. II. Isolation of esterase from liver, A., 251.
- Bamann, *E.*, and Riedel, *E.*, occurrence of two phosphoesterases differentiated by their optimum pH in animal organs, A., 402.
- Riedel, *E.*, and Diederichs, *K.*, phosphatases. II. Liberation of phosphoesterases from liver, A., 251.
- Bambach, *K.*, and Rider, *T. H.*, volumetric determination of halides; use of dichlorofluorescein as adsorption indicator, A., 835.
See also Cook, *E. S.*
- Bambacioni-Mezzetti, *V.*, action of salts of beryllium, zirconium, and palladium on the geotropic sensitivity of roots, A., 264.
- Bamberger, *P.*, and Never, *H. E.*, oxygen content of blood of the brain veins, A., 371.
- Bamford, *C. H.*, and Norrish, *R. G. W.*, primary photochemical reactions. VII. Photochemical decomposition of *iso*-valeraldehyde and di-*n*-propyl ketone, A., 1468.
- Banaitis, *S. I.*, and Oppel, *V. V.*, changes in chemical composition of horse's blood after a race, A., 520.
- Banchetti, *A.*, viscosity of aqueous solutions. II. Mixed solutions of carbamide and urethane, A., 693. Influence of the addition of salts on the temperature of [complete] miscibility in the system water-phenol, A., 1067.
- Bancroft, *F. E.*, and Assoc. Electrical Industries, Ltd., vacuum-distillation apparatus, (P.), B., 659.
- Bancroft, *G.*, Beck, *L. V.*, and Russell, *M. A.*, effect of X-rays on metabolism and growth of transplantable tumours, A., 1525.
- Bancroft, *W. D.*, and Calkin, *J. B.*, taking up of water by cellulose, B., 221. Adsorption of caustic soda by cellulose, B., 401.
Calkin, *J. B.*, and Stillwell, *C. W.*, effect on X-ray pattern of drying caustic-pretreated cotton, B., 224.
and Murphy, *N. F.*, oxidation and reduction with hydrogen peroxide, A., 706.
- Bancroft & Sons, Co., *J.* See Gibbons, *J. T.*
- Band, *W.*, longitudinal thermo-electric effect. IV. Aluminium, A., 1312.
See also Ch'en, *J. L.*, Li, *M. K.*, and Pi, *T. H.*
- Bandel, *F. A.* See Stein & Atkinson, Ltd.
- Bandel, *G.* See Tammann, *G.*
- Bandli, *M.*, carbon papers, (P.), B., 491.
- Bandoni, *A. J.*, evaluation of jalap resin, B., 653.
- Bane, *W. A.* See Hoblyn, *T. N.*
- Banerjee, *B.* See Basu, *U.*
- Banerjee, *B. K.*, action of semicarbazides on anhydrides of dibasic acids, A., 618.
- Banerjee, *B. N.* See Datta, *N. C.*
- Banerjee, *H. N.*, ascorbic acid content of plant fluids, A., 1287.
- Banerjee, *K.*, and Guha, *B. C.*, space-group and atomic arrangements in anthraquinone crystals. I., A., 687.
and Sinha, *K. L.*, structure of benzil, A., 1451.
- Barerjee, *P. C.*, vanadous sulphate as a reducing agent. I., A., 838.
- Banerjee, *S.*, and Sen, *H. K.*, effect of ultra-violet light on enzymic reactions. I. Diastase, A., 1415.
See also Krishnan, *K. S.*
- Banerjee, *S. S.* See Mitra, *S. K.*
- Banerji, *B. N.* See Sen, *R. N.*
- Banerji, *S. K.* See Bardhan, *J. C.*
- Bang, *O.*, blood-lactic acid and oxygen consumption during and after muscular work in man, A., 239.
and Dahm, *C. R.*, mineral metabolism of horses and cows, A., 114.
- Banga, *I.*, significance of fumaric acid in respiration of animal tissues. II. Influence of C_4 acids on tissue-respiration, A., 1406.
- Bangham, *D. H.*, swelling of charcoal. IV. Stoichiometric relations for films of alcohols, A., 29.
Fakhoury, *N.*, and Mohamed, *A. F.*, swelling of charcoal. III. Experiments with lower alcohols, A., 29.
- Banigan, *T. F.*, and Du Pont Rayon Co., treatment of artificial [viscose rayon] threads, (P.), B., 1041.
- Bankowski, *O.*, reciprocal interchange of hydrogen atoms of the co-ordination space of a complex salt and of water, A., 458.
- Banks, *A.*, Dean, *H. K.*, and Hilditch, *T. P.*, composition of commercial palm oils. IV. Progressive hydrogenation as an aid in study of glyceride structure, B., 463.
- Banks, *T. E.*, Chalmers, *T. A.*, and Hopwood, *F. L.*, induced radioactivity produced by neutrons liberated from heavy water by radium γ -rays, A., 276.
See also Brasch, *A.*
- Bannister, *A. R.*, Day, *F. B.*, and Brit. Emulsifiers, Ltd., emulsification of butter and milk for production of artificial cream, (P.), B., 700.
- Bannister, *C. O.*, blast furnace as chemical plant, B., 81.
and Doyle, *W. M.*, bismuth in copper: its effects, determination, and gaseous elimination, B., 231.
- Bannister, *F. A.* [with Hey, *M. H.*], crystal structure of bismuth oxyhalides, A., 920.
- Bannister, *H. J.* See Millican, *T.*
- Bannister, *W. J.*, and Commercial Solvents Corp., production of organic acids by alkaline fusion of cellulosic materials, (P.), B., 715.
Krehma, *I. J.*, and Commercial Solvents Corp., purification of aliphatic monocarboxylic acid esters, (P.), B., 939.
- Banscher, *C.*, soldering of aluminium or aluminium alloys, (P.), B., 506.
- Banta, *R.* See Ralli, *E. P.*
- Banz, *F. X.* See Hulme, *P. M.*
- Baptista, *A. M.* See Rico, *J. T.*
- Baptiste, *E. C. D.*, effect of cations on permeability of cells to water, A., 797.
- Barac, *G.*, determination of phenol, A., 270.
Diazo-reaction of histidine, A., 370.
Diazo-values of blood and urine in acute uranium nephritis in the dog, A., 650. Diazo-value of blood, A., 1000.
See also Lambrechts, *A.*
- Barach, *A. L.*, rare gases not essential to life, A., 370.
See also Richards, *D. W.*, jun.
- Barackman, *R. A.*, and Vaupel, *E. A.*, ash of flour in phosphated and self-rising flours, B., 1115.
- Barak, *M.*, and Style, *D. W. G.*, stability of the acetyl radical, A., 472.
- Baranov, *P. A.*, physical properties of nitrochalk, B., 99.
- Baranov, *S. A.*, forging of cast iron, B., 904.
- Baranov, *V. I.*, and Kretschmer, *S. I.*, use of photographic plates with thick emulsion layers in studying distribution of radioactive elements in natural objects, A., 839.

- Baranov, V. I., and Kurbatov, I. D., radioactive content of water and its sedimentations in pit-hole No. 1 of Oukhta region, A., 60.
- Baranowski, T., and Mozolowski, W., sucrose in the urine in a case of pancreatic disease, A., 385.
- See also Ostern, P., and Parnas, J. K.
- Baranowski, W. See Wachholz, L.
- Barasoin, J. A., and Salvia, R., photometry of X-ray reflexion. II. Comparison of the photographic and ionisation methods, A., 570.
- See also Palacios, J.
- Barbade, P., determination of baking value of wheat, B., 330.
- Barban, M. L., antirachitic action of glycoposphates, A., 238. Is it possible to confer antirachitic activity on phosphorus sub-oxidation derivatives by introduction of a benzene ring? A., 547.
- See also Lecocq, R.
- Barbato, L., effect of tyrosine on gaseous metabolism, A., 1275.
- Barbaumov, N. I., Shutak, D. L., and Zivchinski, A. F., photo-effect in cuprite crystals, A., 430.
- Barbehenn, H. E. See Hardman, A. F.
- Barber, A. T., and Taylor, A. H., high-pressure plant for experimental hydrogenation processes, B., 178.
- Barber, C., comparative study of content and composition of ash in a bacterial species and its virulence, A., 787.
- Barber, C. L., determination of antimony in solder, B., 64.
- Barber, G. E., and Timken-Detroit Axle Co., chromium-plating [bath], (P.), B., 107.
- Barber Asphalt Co. See Douthett, O. R.
- Barbet, E. A., continuous direct rectification of crude petroleum or other hydrocarbons, (P.), B., 89. Distillation [of alcohol] by double effect under vacuum, B., 120.
- Barbani, A., and Gionne, V., treatment of eggs, (P.), B., 748.
- Barbier, D., Chalonge, D., and Vassy, E., effect of temperature of the stratosphere on spectrum of ozone, A., 561. Continuous spectrum of stars of the first spectral types, A., 800. Interpretation of continuous absorption of hydrogen in stars of the first spectral types, A., 1046.
- Barbier, H., [tert.]butyleylene, (P.), B., 182.
- Barbieri, A. G., intermediate compounds between ferrocyanides and ferroammines, A., 181.
- Barbot, A., ventilation of laboratory fume cupboards, A., 723. Simultaneous reactions in pyrolysis of ricinoleic esters and especially of castor oil. I. Mechanism of and optimum conditions for ricinoleic scission, A., 845. Existence of β -epoxy-tautomerism in degradative reactions of organic compounds, A., 1103.
- Barbour, F. A. See Wright, C. I.
- Barbour, H. G., effects of heavy water on mammalian metabolism, A., 1403.
- and Cochran, F. J., apparatus for heavy water studies in small animals, A., 1551.
- See also Sherman, H.
- Barbour, J. H. See Ritter, G. J.
- Barbudo, J. See Collazo, J. A.
- Bărbulescu, F. See Rădulescu, D.
- Barcelo, J., application of benzidine complexes to quantitative analysis, A., 597. Complexes formed between benzidine and metallic salts, A., 613.
- Barchasch, A. P., action of hydrogen peroxide on olefines, A., 957.
- Barcroft, J., foetal respiration, A., 1141.
- Elliott, R. H. E., Flexner, L. B., Hall, F. G., Herkel, W., McCarthy, E. F., McClurkin, T., and Talaat, M., conditions of foetal respiration in the goat, A., 878.
- Elliott, R. H. E., Fraser, F. R., Herkel, W., Matthews, B. H. C., and Talaat, M., deficient acclimatisation to low oxygen pressure, A., 102.
- Flexner, L. B., McCarthy, E. F., and McClurkin, T., utilisation of oxygen by the uterus in the rabbit, A., 888.
- Bardan, D., penthrinite, B., 382.
- Bardeen, J. See Wigner, E.
- Bardenheuer, P., and Geller, W., desulphurisation of pig iron and steel, B., 409.
- and Ploum, H., penetration of brass solder into steel as a result of hydrogen absorption in etching, B., 411.
- and Reinhardt, A., influence of melting with ferrous oxide-rich and acid oxide-poor slags on crystallisation and mechanical properties of grey cast iron, B., 409.
- and Thanheiser, G., course of the reaction in the basic open-hearth process [for steel], B., 807.
- Bardhan, J. C., and Banerji, S. K., derivatives of 0:3:3-dicyclooctane, A., 748. Terpene compounds. I. Synthesis of investigations in the cadinene group, A., 756.
- Banerji, S. K., and Bose, M. K., terpene compounds. II. Synthesis of homopropofenchocamphoric acid, A., 1246.
- Bardout, F. E., fluorene series. II. 3-Nitrofluorenone and its derivatives, A., 1124.
- Baren, F. A. van, occurrence and importance of potash-bearing minerals in Dutch soils, B., 965.
- Barentzen, W. E. See Gugger, P. H.
- Bargen, J. A. See Curry, F. S.
- Barger, G., Bergel, F., and Todd, A. R., crystalline fluorescent dehydrogenation product from vitamin-B₁, A., 1286.
- Seshadri, T. R., Watt, H. E., and Tabuta, T., alkaloids of *Senecio*. I. Retrorsine, A., 365.
- Bargeton, D. See Binet, L.
- Bargilliat, A., chemistry in the service of the printing industry, B., 913.
- Bari, S. von, characteristics of tinctures produced by six different methods, B., 877.
- Bariéty, M. See Achard, C.
- Barjou, A., combustion chambers with water-cooled walls and pulverised coal [firing], B., 1123.
- Barkas, W. W., fibre saturation point of wood, B., 497.
- Barkenbus, C., and Thorn, S. T., oil of the rose mallow (*Hibiscus moscheutos* \times *H. coccineus*) seed, A., 797.
- Barker, E. E., and Plyler, E. K., low-frequency fundamental bands of methyl chloride, bromide, and iodide, A., 1053.
- See also Adel, A., Bartunek, P. F., Nielsen, A. H., and Rendall, H. M.
- Barker, E. H., "frosted wool," B., 665.
- Barker, G. H., installation and maintenance of thermoelectric pyrometers. I. and II., B., 731, 1052.
- Barker, H. See Wheatcroft, E. L. E.
- Barker, H. A., photosynthesis in diatoms, A., 1166. Culture and physiology of marine dinoflagellates, A., 1166.
- Barker, J., light fastness of lead chromes, B., 561.
- Barker, (Miss) M. M. See McBain, J. W.
- Barker, S. B. See Hinmich, H. E.
- Barker, W., apparatus for separating dirt from coal and for other analogous uses, (P.), B., 610.
- Barkoff, S. A. character of the combination of colours in an individual molecule of a dye, A., 1119.
- Barkworth, H., statistical examination of the interrelationship and variability of plate count, presumptive coliform content, and keeping quality of raw milk, B., 872.
- Barman, E. See Matti, J.
- Barnard, G. P., selenium-sulphur rectifier photo-electric cell, A., 839.
- Barnard, J. E. See Schlesinger, B.
- Barnes, A. M. See Duro-Ray, Ltd.
- Barnes, B. O. See Dix, A. S.
- Barnes, C. A. See Thompson, T. G.
- Barnes, C. R. See Parks, L. R.
- Barnes, D. J., rickets; control with 50 units (Steenbock) of cod-liver oil vitamin-D concentrate in milk, A., 1149.
- Cope, F., Hunscher, H. A., and Macy, I. G., human milk. XVI. Vitamin-D potency as influenced by supplementing the diet of the mother, during pregnancy and lactation, with cow's milk fortified with a concentrate of cod-liver oil (test on rachitic infants and rats), A., 379.
- Barnes, E., reduction of selenium dioxide by carbon monoxide, A., 593.
- Barnes, F. F. See Stark, J. T.
- Barnes, H. D., lecithin as a dispersing agent for dibenzanthracene, A., 1460.
- Barnes, I. T. See Fink, L. M.
- Barnes, M. W. See Universal Oil Products Co.
- Barnes, R. B., pure rotation spectra of NH₃ and ND₃, A., 806.
- Benedict, W. S., and Lewis, C. M., far infra-red absorption of benzene, A., 281. Far infra-red spectrum of H₂O, A., 1052. Rotation spectra of ammonia and ND₃, A., 1444.
- and Brattain, R. R., near infra-red spectrum of hexadeuterobenzene, A., 1189.
- Brattain, R. R., and Seitz, F., structure and interpretation of the infra-red absorption spectra of crystals, A., 1444.
- Barnes, R. H. See MacKay, E. M.
- Barnes, R. P., steric hindrance in α -diketones: mesitylbenzylglyoxal [α -diketo- γ -phenyl- α -mesitylpropane], A., 979.
- and Blatt, A. H., action of alkali on acylated ketoximes. I. Effect of structure and configuration, A., 1125.
- Barnes, S. W. See Richtmyer, F. K.
- Barnes, T. C., trihydrol controversy, A., 569.
- and Gaw, H. Z., chemical basis for biological effects of heavy water, A., 657.
- and Larson, E. J., influence of heavy water of low concentration on *Spirogyra*, *Planaria*, and on enzyme action, A., 657.
- Barnes, W. H., Chinese influence on Western alchemy, A., 840. Structure of cellulose, B., 142.
- and Wendling, A. V., Laue symmetry exhibited by orthogonal crystals, A., 811.
- See also Brown, R. S.

- Barnett, A. J. G. See Rule, H. G.
- Barnett, C. E., and Mathews, W. C., thermal properties of rubber compounds. II. Heat generation of pigmented rubber compounds, B., 599.
- Barnett, E. de B., action of maleic anhydride on diphenylisobenzofuran, A., 1377.
- and Campbell, N. R., condensation of naphthalene with phthalic anhydride, A., 1243.
- Goodway, N. F., and Weekes, E. V., anthracene series. X., A., 1235.
- and Lawrence, C. A., derivatives of the di- and tetra-polymethylenoanthracenes. I., A., 1243.
- Barnett, H. M., and S.M.A. Corp., carotene pigment material, (P.), B., 914. Recovery of carotene, (P.), B., 1166.
- Barnett, M. M. See Erickson, J. L. E.
- Barnett, R. S., detection and volumetric determination of alkali metals [in petroleum ash], B., 613.
- Barnette, R. M., and Warner, J. D., response of chlorotic maize plants to application of zinc sulphate to the soil, B., 742.
- See also Heyward, F.
- Barnhart, J. L. See Thurston, L. M.
- Barnicoat, C. R., determination of diacetyl and acetyl methylcarbinol, A., 1516.
- Barnóthy, J., and Forró, M., diurnal variation of cosmic-ray intensity and Nova Herculis, A., 1442.
- Barnum, G. L., vitamin-E content of eggs as related to diet of the hen and to hatchability, A., 1547.
- Barol, A. See Bird, J. C.
- Baron, A. See Courtot, C., and Servantie, L.
- Baroni, A., oxyhalides of lead, A., 833.
- Baroni, E., and Fink, A., concentration of D₂O in natural ice, A., 953.
- Baroni, G., dressing of silk and artificial silk with aqueous emulsions, B., 626.
- Barrand, M. P., heat treatment of cast aluminium alloys, B., 313.
- Barratt, J. O. W., determination of fibrinogen and thrombin, A., 104.
- Barratt, S., calcium sulphate plasters, (P.), B., 62.
- Barreda, P., liver-glycogenesis, A., 891.
- Barrell, H., and Evans, J. C., toluene-mercury thermo-regulator for room control, A., 1339.
- Barrenscheen, H. K., and Beneschovsky, H., metabolism of natural l-phosphoglyceric acid by animal tissues, A., 521.
- Lorber, G., and Meeraus, W., transformation of natural l-phosphoglyceric acid by animal tissue. II. Conversion into phosphopyruvic acid, A., 1017.
- Barrer, R. M., interaction of hydrogen with micro-crystalline charcoal. II. Activated sorption of hydrogen and methane by carbon, A., 818.
- and Rideal, E. K., interaction of hydrogen with micro-crystalline charcoal. I., A., 818.
- Barreto, A. See Bittencourt, A. C.
- Barrett, C. S., and Gensamer, M., stress analysis by X-ray diffraction, A., 1449.
- Kaiser, H. F., and Mehl, R. F., Widmannstätten structure. VII. Copper-silver system, A., 693.
- Barrett, Edward P., and Wood, C. E., nitrogen content of sponge iron and of metal obtained by melting sponge iron, B., 103.
- See also Dean, R. S., Joseph, T. L., and Wood, C. E.
- Barrett, Elliott P., shaft-furnace reduction by the glomerule method, B., 103.
- Barrett, H. J. See Du Pont de Nemours & Co., E. I.
- Barrett, H. M., antirachitic effect of ultra-violet radiation transmitted by a smoky atmosphere, A., 1546.
- Barrett, J. F., modified Nessler's reagent for micro-determination of urea in tungstic acid blood-filtrate, A., 1517.
- Barrett, J. W., Cook, A. H., and Linstead, R. P., fused carbon rings. V. Synthesis of reduced dicyclic systems, A., 1239.
- and Linstead, R. P., fused carbon rings. IV. Further investigation of 0:3:3-dicyclocatones in relation to the strain theory. VI. Optical activity connected with the presence of multi-planar rings, A., 750, 1239.
- Barrett, L. J., and Garno, G. E., centrifugal machine, (P.), B., 50.
- Barrett, W. H., mechanical composition of the London Tertiaries in the neighbourhood of Harrow-on-the-Hill, A., 1220.
- Barrett Co., and Brandon, G. E., distillation of tar and recovery of products therefrom, (P.), B., 343.
- and Cole, P. J., [acid]-pickling compounds [corrosion inhibitors for metals], (P.), B., 66.
- and Ellms, E. H., direct recovery of tar acids, (P.), B., 260. Distillation of tar, (P.), B., 343.
- and Harvey, E. W., ammoniation of superphosphate, (P.), B., 270. Ammonium salt [for fertilisers], (P.), B., 543.
- and Jones, R. M., fertiliser, (P.), B., 1062.
- and McCloskey, G. E., distillation of tar, (P.), B., 983. Refining of [creosote] oils, (P.), B., 983.
- and Miller, S. P., solution and apparatus therefor [scrubbing of gases], (P.), B., 85. Dehydration of tar, (P.), B., 88. Distillation of tar, (P.), B., 88, 343, 936. Converting tar or pitch into coke, (P.), B., 88. Coking of tar or pitch, (P.), B., 88. Distillation of tar or pitch to coke and apparatus therefor, (P.), B., 180. Operation of retort-gas plants, (P.), B., 342. Fuel composition, (P.), B., 393. Granulated pitch, (P.), B., 440. Vacuum distillation, (P.), B., 579. Low-temperature carbonisation of coal, (P.), B., 615. Recovery and processing of by-products at a coal-distillation plant, (P.), B., 982.
- Miller, S. P., and Hamlin, M. L., distillation of coke-oven tar, (P.), B., 343. Melting of pitch and production of pitch products, (P.), B., 343.
- and Stupp, C. G., distillation of hydrocarbons, etc., (P.), B., 89.
- and Wittenberg, L., treatment of tars, (P.), B., 936. Curing of concrete, (P.), B., 1144.
- and Zaveritnik, J., jun., tar distillation, (P.), B., 758.
- Barrington, E. J. W., proteolytic digestion in the ammocete larva, A., 1163.
- Barron, E. S. G., and Hastings, A. B., biological oxidations. III. Oxidation-reduction potential of the system lactate-enzyme-pyruvate, A., 121.
- See also De Meio, R. H.
- Barron, H., tensile properties of [rubber] latex products, B., 162.
- Barrow, F., and Ferguson, G. W., stereochemical relationships of optically active amines and amino-acids. I. Configuration of valine, A., 736.
- Barrow, G. M. See Westinghouse Elec. & Manufg. Co.
- Barrows, W. M., jun. See Green, J. B.
- Barry, G., Cook, James Wilfred, Haslewood, G. A. D., Hewett, C. L., Hieger, I., and Kennaway, E. L., production of cancer by pure hydrocarbons. III., A., 774.
- Barry, H. C. See Wardlaw, H. S. H.
- Barry, R. E., and Bassett, R. T., treatment of hydrocarbon oils, (P.), B., 11.
- Barry, V., and Dillon, T., preparation and properties of alginic acid; extraction of marine algae with various solvents, A., 550.
- Barry, W. J., and McClelland, E. W., thionaphthenopyrazoles, A., 763.
- Barsch, H., new glass apparatus. I. Siphon with attached filter. II. Filter reagent glass, A., 189. Sulphonation flask, A., 639. Extraction test-tube, A., 840. Testing of [potable] spirits with the quartz [ultra-violet] lamp, B., 872.
- Barsi, F. See Burès, E.
- Barsky, G., Swainson, S. J., and Hedley, N., cyanidation. I., B., 500.
- Barstow, E. O. See Dow Chem. Co.
- Barsuk, A., preparation of a chrome-tanned, black, calf-leather chamois, B., 817.
- Barsukov, G. S., cellulose lacquers, B., 160.
- Bart, B., and Precious Metals Developing Co., tarnish-resisting silver, (P.), B., 273.
- Bart, E. V., Erich, V. N., and Gervart, J. G., heat treatment under pressure of vapour-phase cracked gasoline, B., 1030.
- Bart, G. M. See Skinner, J. J.
- Barta, L., determination of small amounts of pyridine in presence of nicotine and ammonia, A., 877. Micro-determination of furfuraldehyde, methylfurfuraldehyde, and hydroxymethylfurfuraldehyde; furfuraldehyde content of foodstuffs [and tobacco], B., 91.
- Bartberger, C. L., energy levels of inert gas configurations, A., 1443.
- Bartel, L. H. See Reimers, J. H. W. T.
- Bartel, R., and Ansoerge, E., development of Wiskiauten and Wosgau farms by ameliorative treatment of meadows and pastures and the use of modern methods of fodder conservation, B., 699.
- Bartell, F. E., and Bartell, L. S., quantitative correlation of interfacial free surface energies, A., 29.
- and Hatch, G. B., wetting characteristics of galena, A., 442.
- Bartell, L. S. See Bartell, F. E.
- Bartels, E. C., and Blum, B., water studies in obesity, A., 1404.
- Bartels, H. See Traubenberg, H. R. von.
- Barter, A. M. See Archbold, H. K.
- Barth, E. See Schindel, L.
- Barth, E. J., and Sinclair Refining Co., chlorination of paraffin waxes, (P.), B., 90.
- Barth, G. See Suhrmann, R.
- Barth, H., intensity ratio of hyperfine structure components of the caesium line 4555 Å., A., 556. Investigation of mitogenetic radiation with the counter tube, A., 1302.
- Barth, L. G., chemical nature of the amphibian organiser. I. Use of cephalin fraction of mammalian brain as an inducing agent, A., 519.

- Barth, T. F. W., non-silicates with cristobalite-like structure, A., 921.
and Balk, R., chloritoid from Dutchess County, New York, A., 60.
- Barth, V. See Ott, F.
- Barth, W., purification of blast-furnace gas in vortex chambers, B., 1144.
- Barthel, C., and Bengtsson, N., nitrification of stall manure in arable soil. X., B., 324.
- Barthel & Co., Chem. Fabrik G.m.b.H., M., conduct of distillation under high vacuum, (P.), B., 754.
- Barthélemy, E. M. C., differential flotation of sulphide copper and zinc ores, (P.), B., 314.
- Barthen, C. L., and Health Products Corp., [continuous] separation, or extraction, from oils and fats, of the unsaponifiable fraction possessing the vitamin potency present therein, (P.), B., 1150.
- Bartholomé, E., and Clusius, K., calorimetric measurements with heavy water, A., 584.
and Sachsse, H., significance of the isotope effect in the analysis of the vibration spectra of organic molecules, A., 1189.
See also Clusius, K., and Sachsse, H.
- Bartholomew, H. T., and Raby, E. C., photonic photo-electric turbidimeter for determining hydrocyanic acid in solutions, A., 317.
- Sinclair, W. B., and Raby, E. C., granulation (crystallisation) of Valencia oranges, B., 43.
See also Sinclair, W. B.
- Bartholomew, R. P., fluorine, its effect on plant growth, and its relation to the availability to plants of phosphorus in phosphate rocks, B., 1109.
See also Jacob, K. D.
- Bartkiewiczówna, J. See Dominik, W.
- Bartlett, J. H., jun., Gibbons, J. J., jun., and Dunn, C. G., normal helium atom, A., 804.
See also Gibbons, J. J., jun.
- Bartlett, P. D., *cis*- and *trans*-chlorohydrins of cyclohexene, A., 486.
and Berry, C. M., reaction of magnesium dimethyl and diethyl with cyclohexene oxide, A., 208.
and Vincent, J. R., rate of alkaline chlorination of ketones, A., 1353.
and White, R. V., *cis*- and *trans*-chlorohydrins of 1-methyl- Δ^1 -cyclopentene, A., 208.
- Bartlett, P. G. See Parks, L. R.
- Bartlett & Snow Co., C. O. See Bighouse, H. H., and Osborn, I. S.
- Bartling, F., and Alterum Kredit, A.-G., alkali carbonate or hydroxide and by-products of ammonia or ammonium salts, (P.), B., 269. Highly-active alkali-carbon briquettes for the preparation of alkali cyanides, (P.), B., 673.
Meier, A., and Alterum Kredit A.-G., absorption of nitrogen oxide gases mixed with oxygen or air, (P.), B., 673.
- Bartmann, H. See Keil, W.
- Barton, H. A., and Mueller, D. W., detection of nuclear disintegration products, A., 1441.
- Barton, L. E. See Parks, G. S.
- Barton, L. V., storage of vegetable seeds, B., 1110.
- Barton, R. C., and Yost, D. M., dissociation of sulphur monochloride vapour, A., 446.
- Barton, T. H. See Moore, B.
- Bartow, E., disposal of wastes from the beet-sugar industry, B., 249.
and Little, E. C., action of solvents on Steffen's waste water from manufacture of beet sugar, B., 249.
- Bartram, V. T., and Metallics & Non-Metallics, Ltd., drying of granular or similar material, (P.), B., 177.
- Bartrum, J. A., occurrence of sal ammoniac at Tamaki, Auckland, A., 61.
- Bartsch, O., relation between permeability to water and structure of fireproof building materials, B., 24. Action of glass on refractory building materials, B., 545.
- Bartschat, F., microscopical examination of feeding-stuffs after screening and chloroform treatment, B., 876.
- Bartunek, K. See Waldschmidt-Leitz, E.
- Bartunek, P. F., and Barker, E. F., infrared absorption spectra of the linear molecules carbonyl sulphide and deuterium cyanide, A., 1300.
See also Roth, F. L.
- Bartz, Q. R., Miller, R. F., and Adams, R., introduction of *isobutyl* groups into phenols, cresols, and homologous compounds, A., 483.
- Baschilov, I. J., treatment of uranium-containing solutions with metallic iron, B., 856.
- Baschulin, P. A., Baskakov, A. A., and Striganov, A. P., quantitative spectrum analysis for determination of magnesium, manganese, silicon, and iron in duralumin, B., 317, 361.
- Bashkurov, A. N. See Karavaev, N. M.
- Bashour, T. T., and Lindwall, H. G., synthesis of pyrrolones from acetophenone and benzoylformanilide, A., 498.
- Basiński, A., stability of colloids; stability of negatively charged colloidal silver iodide, A., 297. Application of international, rational, and practical at. wts., A., 558.
- Baskakov, A. A. See Baschulin, P. A.
- Baskerville, W. H., and Cameron, F. K., ferric oxide and aqueous sulphuric acid at 25°, A., 1078.
- Baskin, C. M. See Standard Oil Development Co.
- Basore, C. A., and Hull, L. H., utilisation of blast-furnace slag in glass manufacture, B., 453.
- Bass, A. D. See Lamson, P. D.
- Bass, H. H., sugar boiling; its effect on quality of raw sugar, B., 75.
- Bass, S. L., Fenn, H. N., and Commercial Solvents Corp., *sec*-butyl lactate, (P.), B., 262.
- Bassal, use of metals in furnace construction, B., 25.
- Basset, J., synthesis of ammonia at very high pressures greater than 1000 kg. per sq. cm. and the chemistry of very high pressures, A., 455.
and Dodé, M., direct synthesis of nitrates at ultra-pressures, A., 593.
Machebeuf, M. A., and Perez, J. J., biological effects of high pressures; change in antigenic specificity of serum under the influence of very high pressures, A., 510.
See also Comp. de Prod. Chim. & Electro-métall. Alais, Froges & Camargue, and Dodé, M.
- Basset, L. P., simultaneous manufacture of iron or steel and Portland cement or hydraulic lime, (P.), B., 503.
- Bassett, H., and Henry, A. J., formation of dithionato by oxidation of sulphurous acid and sulphites, A., 1090.
- Bassett, H. N., protective paints for structural steelwork, B., 561. Prevention of crusting on boiler safety plugs, B., 1049.
- Bassett, H. P., purification of bast fibres, (P.), B., 350. Removing solvents from plastic colloids, (P.), B., 861.
- Bassett, I. P. See Miller, R. S.
- Bassett, L. G., and Stumpf, L. F., ceric sulphate for determining tin in bearing metals, B., 64.
- Bassett, R. T. See Barry, R. E.
- Bassett, W. H., jun., and Snyder, C. J., preparation of lead and lead-rich alloys for microscopical examination, B., 636.
- Bassitt, E., and Lanston Monotype Machine Co., photographic plates, (P.), B., 254.
- Bastet, A., lubrication of internal-combustion engines with olive oil. II. Use of demargarinated olive oil, B., 582.
- Bastien, P., foundry properties of metals and binary alloys, B., 28.
- Bastisse, E. See Demolon, A.
- Bastow, S. H., and Bowden, F. P., physical properties of surfaces. II. Viscous flow of liquid films, A., 1201.
See also Bowden, F. P.
- Basu, K., and Chakravarti, R., action of dyes and narcotics on proteolytic enzymes; trypsin and papain, A., 784.
- Basu, K. L. See Goswami, M.
- Basu, N. K., sterols as a source of vitamin-A, A., 129. Sunlight and action of vitamins, A., 131. Biochemical standardisation of vitamin-D or irradiated ergosterol, A., 1176.
- Basu, S., spectrum of doubly-ionised zinc, A., 1437.
- Basu, U., synthesis of *Bz*-tetrahydroquinolines. II., A., 222. Syntheses in the pyridine series, A., 1250. Ketimine-enamine compounds, A., 1250.
and Banerjee, B., syntheses of *Bz*-tetrahydroisoquinolines, A., 628.
- Bataafsche Petroleum Maatschappij, splitting up a liquid mixture into its components or groups of components [by extraction], (P.), B., 4. Reducing pour point of oils and manufacture of oils having a low pour point, (P.), B., 89. Liquid fuels for internal-combustion engines, (P.), B., 216, 713. Lubricants and lubricating, (P.), B., 346. Alk[yl]enes and derivatives thereof, (P.), B., 539. Chlorohydrins, (P.), B., 584. Apparatus for contacting gases or vapours with liquids, (P.), B., 610. Splitting up a liquid mixture into its components or groups of components, (P.), B., 618. Polymerisation of fatty oils, (P.), B., 683. Bituminous road oils, (P.), B., 758. Oils with a low paraffin wax content, (P.), B., 759. Refining of hydrocarbon oils, (P.), B., 794. Lubricating oils resistant to oxidation, transformer oils, etc., (P.), B., 794. Concentration of organic carboxylic acids, (P.), B., 796. Ethylene oxide, (P.), B., 938. Alcohols, (P.), B., 938. Fractionation of gasoline, (P.), B., 1128. Absorption of nitrogen oxides, (P.), B., 1142. Light-coloured bituminous road constructions and pavements, (P.), B., 1144.
- Deanesly, R. M., and Hearne, G., chlorination of hydrocarbons, (P.), B., 13.

- Bataafsche Petroleum Maatschappij, and Groll, *H. P. A.*, manufacture and application of unsaturated [alkyl] xanthates, (P.), B., 443. Conversion of unsaturated primary or secondary alcohols into their corresponding unsaturated carbonyl compounds, (P.), B., 1130.
- Groll, *H. P. A.*, and Hearne, *G.*, treatment of unsaturated monohalides, (P.), B., 1129.
- Millar, *R. W.*, and Groll, *H. P. A.*, removal of hydrocyanic acid from mixtures, (P.), B., 948.
- and Pyzel, *F. M.*, ammonium sulphate, (P.), B., 991.
- Tamele, *M. W.*, and Groll, *H. P. A.*, treatment of unsaturated organic halogenated compounds, (P.), B., 715.
- See also Peski, *A. J. van*.
- Batalin, *V. S.*, and Ugriumov, *P. G.*, preparation of *p*-butylene chlorohydrin, A., 62.
- Batanov, *V.* See Isabolinski, *M.*
- Batchelor, *T. G.* See Montgomery, *A. E.*
- Bateman, *A. W.* See Du Pont de Nemours & Co., *E. I.*
- Bateman, *J.*, breeze-burning [gas] producers, B., 340.
- Bates, *G. H.*, and Martin, *L. D.*, sulphuric acid spraying of potato haulm to prevent late infection of the tubers with blight, B., 689.
- Bates, *G. N.* See Vigfusson, *V. A.*
- Bates, *H. C.*, jacketed industrial glass heat exchanger, B., 529.
- Bates, *J. B.* See Harrell, *C.*
- Bates, *J. R.*, Halford, *J. O.*, and Anderson, *L. C.*, comparison of physical properties of hydrogen and deuterium iodides, A., 1064. Comparison of physical properties of hydrogen and deuterium bromides, A., 1313.
- See also Cook, *G. A.*, Halford, *J. O.*, and Jones, *Loren T.*
- Bates, *L. F.*, and Hogwood, *H. E.*, Raman spectrum of a ferromagnetic oxide, A., 1301.
- and Pantulu, *D. V. R.*, magnetic properties of amorphous manganese, A., 573.
- Bates, *R. W.*, and Koch, *F. C.*, trypsinogen, enterokinase, and trypsin system; assay methods for trypsinogen and enterokinase, A., 1417.
- Lahr, *E. L.*, and Riddle, *O.*, protein nature of prolactin and follicle-stimulating hormones, A., 542. Gross action of prolactin and follicle-stimulating hormone on the mature ovary and sex accessories of fowl, A., 1426.
- See also Riddle, *O.*
- Bates, *W. R.* See Knapp, *E. A.*
- Bateson, *J.* See Burton, *D.*
- Bateson, *R. G.*, timber seasoning, B., 1143.
- Batjer, *L. P.*, seasonal variation in oxidation-reduction potential of orchard soils, B., 421.
- Battaglia, *A.* See Maffei, *A.*
- Battagay, *M.*, and Riesz, *E.*, dianthraquinonylguanidines, A., 1254.
- Battelle Memorial Institute, adherent patina on copper and its alloys, (P.), B., 556.
- See also Trion, *C. E.*, and Williams, *C. E.*
- Battelli, *F.*, Zimmet, *D.*, and Gazel, *P.*, haemolysing action of the smokes of tobacco and other plant products on the blood *in vitro*, A., 881.
- Battle, *H. L.*, digestion of digestive enzymes in the herring (*Clupea harengus*, L.), A., 1416.
- Batuecas, *T.*, hydrogen sulphide, A., 438.
- Bauch, *W.* See Hollmann, *H. E.*
- Baudisch, *O.*, magnetic investigations of mechanism of oxidation, A., 829. Spectroscopically pure γ -ferrie oxide in colloidal aggregation as a biological indicator; preparation of γ -Fe₂O₃·H₂O, and γ -Fe₂O₃, A., 834. Spectro-analytically detected elements adsorbed on ferromagnetic colloidal γ -ferrie oxide as biological indicators, A., 1182. New sulphur-bacterium from the thermal springs of Santa Rosalia, Mexico, A., 1281.
- and Euler, *H. von*, carotenoid content of peaty soils, A., 1180.
- Baudouin, *A.*, Azérad, *E.*, and Lewin, *J.*, hypoglycaemia provoked in diabetics, A., 1008. Hyperglycaemia and hypoglycaemia provoked in myxœdema, A., 1009.
- Bénard, *H.*, Lewin, *J.*, and Sallet, *J.*, effect of slow and continuous injection of adrenaline on blood-sugar, A., 641.
- Baudrexler, *H.* See Hönigsmid, *O.*
- Bauer, *A.*, killing of spores by mercuric chloride and silver nitrate, B., 700.
- Bauer, *Edmond*, and Magat, *M.*, Raman spectrum of liquid heavy water, A., 1445.
- Bauer, *Erwin*, mechanism of enzyme action; rôle of neutral salts in action of amylase on starch, A., 401.
- See also Schäffner, *A.*
- Bauer, *F.* See Dafert, *O.*, and Grünsteidl, *E.*
- Bauer, *F. C.*, response of Illinois soils to limestone, B., 917.
- Bauer, *Hans*, supersaturation theory of intervals in space and time between Liesegang precipitates, A., 27.
- Bauer, *Herbert*, quantitative spectral analysis of slightly volatile substances in the arc; lanthanum oxide, A., 318.
- Bauer, *Hugo*, and Burschkies, *K.*, saturation pressure of mustard oils and sulphides, A., 966.
- and Strauss, *E.* [with Maschmann, *E.*], substitutions in tyrosine and histidine, A., 1122.
- Bauer, *H. F.*, and Stein-Hall Manufg. Co., conversion of starch [in flours], (P.), B., 871.
- Bauer, *J.* See Paweck, *H.*
- Bauer, *J. H.*, and Cox, *H. R.*, ultrafiltration of the virus of vesicular stomatitis, A., 1030.
- and Hughes, *T. P.*, preparation of graded collodion membranes and their use in study of filterable viruses, A., 257.
- Bauer, *K. H.* [with Limbach, *S.*, and Kappeler, *G.*], evaluation of native plants. I. Peppermint leaves, B., 877.
- and Junge, *R.*, scammonium resin, A., 87.
- Bauer, *M.* See Dafert, *O.*
- Bauer, *O.* (Berlin-Dahlen), and Arndt, *H.*, attack of copper, nickel, and copper-nickel alloys by washing and bleaching agents, B., 27.
- Arndt, *H.*, and Krause, *W.*, chromium-plating in automobile construction, B., 233.
- and Tonn, *W.*, arsenic-lead alloys, A., 1314.
- Bauer, *O.* (München). See Täufel, *K.*
- Bauer, *Oskar*, vitamin synthesis, A., 543.
- Bauer, *S. H.*, mass spectrometer, A., 1475.
- and Pollack, *A.*, orientation of unsymmetrical molecules at interfaces, A., 1057.
- Bauer, *W.*, Lauth, *H.*, and Röhm & Haas Co., esters of acrylic acid, (P.), B., 138.
- and Lennig & Co., Inc., adhesive, (P.), B., 1106.
- Baughan, *E. C.*, mechanism of the Liesegang phenomenon, A., 27.
- See also Bell, *R. P.*
- Bauguess, *L. C.*, and Berg, *C. P.*, availability of indole derivatives for supplementing diets deficient in tryptophan, A., 1405.
- Baukloh, *W.*, and Durrer, *R.*, primary reaction of metal oxides with solid carbon, A., 592.
- and Hoffmann, *A.*, permeability of refractory materials for hydrogen, B., 674.
- Kronenfels, *W. von*, and Guthmann, *H.*, decarburisation of cast iron with hydrogen, B., 189.
- Baum, *G. M.* See Freed, *C. J.*
- Baum, *H.*, covering similar to linoleum, (P.), B., 279.
- Bauman, *L.* See Cortese, *F.*
- Baumann, *A.* See Zimmermann, *W.*
- Baumann, *C. A.*, Rüsing, *B. M.*, and Steenbock, *H.*, fat-soluble vitamins. XLII. Absorption and storage of vitamin-A in the rat, A., 260.
- See also Semb, *J.*
- Baumann, *E. J.* See Marine, *D.*
- Baumann, *G.* See Alphonse, *P.*
- Baumann, *H. N., jun.* See Benner, *R. C.*
- Baumann, *J.*, new agent produced from urine of pregnant women and its biological effects, A., 1034.
- Baumann, *T.*, physico-chemical character of faeces of normal infants and children with special reference to apple and banana diet, A., 380.
- Baumberger, *J. P.* See Eagle, *H.*
- Baumer, *N. J.*, candle, (P.), B., 109.
- Baumgärtel, *T.*, water sterilisation with ultra-violet light, B., 608.
- Baumgart, *K.* See Eichholtz, *F.*
- Baumgarten, *G.* See Mannich, *C.*
- Baumgarten, *P.*, condensation of homophthalaldehyde to 2-phenylulphthalene-5:2'-dialdehyde, A., 1123.
- Baumgartner, *O.* See Bruman, *F.*
- Baumgürtel, *B.* See Lottermoser, *A.*
- Bauminger, *B.* See Lieben, *F.*
- Baumrucker, *G. O.* See Herbst, *R. H.*
- Baur, *A. J.*, effect of composting on chemical and biological changes in peat and in wheat straw, B., 165.
- Baur, *E.*, behaviour of iodostarin in light, A., 1350. Photochemical reaction of chlorophyll, A., 1510.
- and Brunner, *R.*, measurements of vapour pressure of high-boiling metals, A., 1454. Behaviour of oxygen electrodes in carbonate melts, A., 1462.
- and Fabbriotti, *G. F.*, sensitised bleaching of palm oil by light, B., 364.
- and Schindler, *G.*, aminolysis of leucine, A., 1356. Hydrolysis of phenylalanine, A., 1465.
- Baur, *L.*, and Link, *K. P.*, methylglucosides of naturally occurring hexuronic acids. IV. Polygalacturonic acid methylglucosides derived from Ehrlich's "Pektolsäure" and "Pektolactonsäure," A., 732.
- See also Morell, *S.*
- Baur, *P.*, paints for air-defence apparatus, B., 417.
- Bausch, *K.*, deformation slip in single tin crystals, A., 435.
- Bausch, *W.* See Brand, *K.*

- Baver, L. D. See Winterkorn, H.
- Bawdon, F. C., virus causing foliar necrosis of the potato, A., 269.
- Bawn, C. E. H., oxidation of carbon monoxide by nitrous oxide, A., 307. Kinetics of decomposition of nickel carbonyl, A., 308. Steric factor of bimolecular association reactions, A., 1464.
- and Evans, A. G., rates of reaction of sodium atoms with hydrogen and deuterium chlorides, A., 1327.
- Baxley, C. H., and Larson, C. M., lubricants used in the cotton and woollen industry, B., 791.
- Baxter, G. P., and Alter, C. M., at. wts. of several radiogenic leads, A., 558.
- and Frizzell, L. D., revision of the at. wt. of arsenic; ratio of arsenic trichloride to iodine, A., 801.
- Hönigschmid, O., Lebeau, P., and Meyer, R. J., fifth report of the Atomic Weights commission of the International Union for Chemistry, A., 909.
- and Thomas, J. S., comparison of copper extracted from the blood of the horseshoe crab (*Limulus polyphemus*) with common copper, A., 643.
- Baxter, J. P., Burrage, L. J., and Tanner, C. C., density of liquid hydrogen sulphide, A., 290.
- See also Imperial Chem. Industries.
- Bayer, O. See Gen. Aniline Works, Inc.
- Bayerische Stickstoff-Werke Akt.-Ges., soluble phosphate fertiliser, (P.), B., 168. Disintegration of calcium cyanamide, (P.), B., 1092.
- Bayfield, E. G., [wheat-flour] viscosity test, B., 170. Soft winter wheat studies. III. Effect of some factors influencing viscosity and protein, B., 425. Whole wheat meal fermentation time test, B., 697. Report of Sub-committee on viscosity [of wheat flours], B., 1114.
- Bayley, C. H., and Hopkins, C. Y., water-tolerance of mixtures of gasoline with ethyl alcohol, isopropyl alcohol, and benzene, B., 86.
- See also Cambron, A.
- Bayley, P. L., Raman spectra of five higher alcohols, A., 11. Raman spectra [of *n*- and sec.-butylamine and *n*-heptylamine], A., 146.
- Baylis, J. R., treatment of water to prevent corrosion, B., 480. Filtering materials for rapid sand filters. IV. Washing rapid sand filters, B., 704.
- See also Spector, B. K.
- Baylis, W. S., and Patco, Inc., vapour-phase treatment of [cracked petroleum] oils, (P.), B., 55.
- Bayliss, L. E., digestion in the plaice (*Pleuronectes platessa*), A., 404.
- Bayliss, M., and Halvorson, H. O., germicidal and detoxifying properties of soaps, B., 508.
- See also Halvorson, H. O.
- Bayliss, N. S., absorption spectrum of methyl iodide, A., 1188.
- Bazanov, P. I. See Krantz, M. I.
- Bazarova, D., oiling leather with petroleum, B., 863.
- Bazen, M. L. See Verbeek, H. P. J.
- Bazhulin. See under Bashulin.
- Bazilevich, A., synthesis of spiuels, A., 841.
- Bazilevich, L. P. See Saposchnikov, L. M.
- Beach, J. Y. See Pauling, L.
- Beach, K. A. See Appar, F. A.
- Beach, N. F. See Eastman Kodak Co.
- Beach, W. S., tobacco wildfire control in Pennsylvania, B., 567.
- Beadle, L. C., osmotic regulation in *Gunda ulva*, A., 1012.
- Beal, C. L. See Amer. Anode, Inc.
- Beal, G. D., and Szalkowski, C. R., U.S.P. thyroid assay, B., 1164.
- Beale, H. P., serum reaction as an aid in study of filterable viruses of plants, A., 270.
- Beall, D. See Marrian, G. F.
- Beamersderfer, J. S., common refrigerants, B., 881.
- Beam, J. R., sp. gr. as an index for slip control, B., 1142.
- Beams, J. W., and Snoddy, L. B., acceleration of ions, A., 1440.
- See also Pickels, E. G.
- Bear, R. S., and Eyring, H., relation between vector and linking Eigenfunction methods for spin degeneracy, A., 427.
- See also Schmitt, F. O., and Spedding, F. H.
- Beard, G. E. See Du Pont de Nemours & Co., E. J.
- Beard, H. C. See Parks, L. R.
- Beard, H. D. See Andes, E. J.
- Beard, H. H., prophylactic effect of vitamin-A and -D on prevention of common cold and influenza, A., 384.
- Beard, H. R., preservation of foods, (P.), B., 380.
- Beard, L. C., jun. See Rather, J. B.
- Beard, P. See Sahyun, M.
- Beard, P. J., and Kendall, N. J., sterilising velocities of chlorine and chloroamine under varying conditions of organic load and pH, B., 927.
- and Meadowcroft, N. F., survival and rate of death of intestinal bacteria in sea-water, A., 1419.
- See also Cleary, J. P., and Clifton, C. E.
- Bearden, J. A., measurement of X-ray wave-lengths by large ruled gratings, A., 1292. Use of oil diffusion pumps for evacuating X-ray tubes, A., 1340. Wilson cloud chambers with an increased time of sensitivity, A., 1341.
- and Shaw, C. H., absolute X-ray wave-lengths by refraction in quartz, A., 4. Shapes and wave-lengths of K-series lines of elements Ti22 to Ge32, A., 1047.
- See also Wheeler, J. A.
- Beardsley, E. W., and Petroleum Conversion Corp., combination reaction chamber and scrubber [for converting hydrocarbon oils], (P.), B., 663.
- Sachs, A. P., and Petroleum Conversion Corp., conversion of hydrocarbon oils, (P.), B., 892.
- Beardsley, W. H., and Sinclair Refining Co., coking of hydrocarbons, (P.), B., 344.
- Beardsley, W. J., and Styles, B. J., determination of mercury in mercury-chalk preparations, B., 253.
- Beare, W. G., and Bowden, F. P., physical properties of surfaces. I. Kinetic friction, A., 1065.
- Bearse, G. E. See Miller, M. W.
- Beattie, J. A., apparatus and method used in measuring compressibility of gases at 0–325°, A., 1099.
- Hadlock, C., and Poffenberger, N., critical constants of propane, A., 437. Compressibility of and equation of state for gaseous ethane, A., 438.
- Beattie, J. H., manuring of newly cultivated soils. II. United States of America, B., 515.
- Beatty, H. O., and Hillbold, H. O., filter, (P.), B., 1075.
- Beaudeau, P., commercial balsam of Peru: its assay, B., 876.
- Beaumont, A. B., and Snell, M. E., effect of magnesium deficiency on crop plants, B., 778.
- See also Thelin, G.
- Beaumont, G. E., and Maycock, J. W., erythrocyte sedimentation rate, A., 1141.
- Beaune, A., comparative pharmacodynamic properties of cardiotonic glucosides, A., 1531.
- Beauverie, J., resistance of individual cells of micro-organisms of the same species to the action of ultra-violet rays, A., 124.
- Beavan, A. P. See Hawley, J. E.
- Beavens, E. A. See Phillips, Max.
- Bebeschin, K. V. See Smorodincev, I. A.
- Bebie, J., Doelling, G. L., and Wagner Electric Corp., [hydraulic brake] fluid compositions, (P.), B., 338.
- Bebin, P. See Souviron, P. F. J.
- Béchar, C., electrodeposition of alloys of copper and tin, B., 730.
- Bechar, R. M., reducing locusts and their control at Amatikulu, B., 423.
- Bechdel, S. I. See Jack, E. L.
- Becher, H. L., and Bennett, Inc., paraffin emulsion, etc., (P.), B., 760.
- Bechert, K., and Meixner, J., structure of the hydrogen lines, A., 675.
- Bechmann, R., velocity of sound in anisotropic media, particularly in quartz measured by piezo-electric excitation, A., 20.
- Bechter, A. A., Sadovnikov, L. M., and Linev, A. O., newsprint from 100% groundwood, B., 1039.
- Beck, A., Clément, L., and Rivière, C., chemical and physical nature of nitrocellulose; separation of nitrocelluloses, B., 623.
- Beck, August, [machine for] refining of chocolate and similar masses, (P.), B., 286. Refining of chocolate, and similar masses, (P.), B., 523.
- Beek, A. B., occurrence of *Azotobacter* in South Australian soils, B., 820.
- Macbeth, A. K., and Winzor, F. L., absorption spectra of hydroxynaphthaquinones and of the colouring matter of *Drosera Whitakeri*, A., 347.
- Beck, F. J., jun. See Clash, R. F., jun.
- Beck, G., systematics of isotopes, A., 1048. β -Processes and nuclear stability, A., 1186.
- and Horsley, L. H., anomalous scattering and structure of light nuclei, A., 560.
- Beck, G. W. T., apparatus for distilling crude oil and other liquids, (P.), B., 610.
- Beck, Jean. See Tixier, G.
- Beck, Joseph, natural guano, B., 567.
- Beck, J. S. P. See Farthing, J. W.
- Beck, L. V., discrepancies in value of the aerobic reducing intensity of the yeast cell and starfish egg, A., 897. Inhibitory action of the lower aliphatic acids and aldehydes on cytochrome reduction in yeast, A., 1539.
- See also Bancroft, G.
- Beck, W., prevention of explosions of alkali nitrate melts for refining of metals, B., 809.
- Beck, Koller & Co., Inc. See Hönel, H.
- Becke, F. See Späth, E.
- Becken, G. See Nelson, H. H.
- Beckenbach, J. R. See Young, H. C.

- Becker, A. E. See Standard Oil Development Co.
- Becker, B. See Euler, H. von, and Karrer, P.
- Becker, C. A., chemical and physical investigation of beryllium glasses, B., 404.
- Becker, E. A., determination of sp. gr. of liquids, A., 189.
- Becker, E. H. See Martus, M. L.
- Becker, E. R., and Morehouse, N. F., effect of skim-milk, lactose, vinegar, and iodine on the quantitative character of a coccidian infection, A., 1419.
- Becker, F., and Dittmar, P., determination of moisture in powders, B., 255. See also Haid, A.
- Becker, G., and Roth, W. A., heat of formation of ammonia and nitric acid, A., 108. Heat of dilution of nitric acid, A., 1324.
- Becker, Gerhard. See Schröer, E.
- Becker, Gottfried. See Hertel, E.
- Becker, Gotthold. See Valentiner, S.
- Becker, G. D., and Allis-Chalmers Manufg. Co., crusher, (P.), B., 338.
- Becker, H., and Lempicki, E., approximate determination of the carbon monoxide content of blood, A., 507.
- Becker, Jenö, vitamin-C (ascorbic acid) content of "Vitaprie," B., 1116.
- Becker, Joseph. See Koppers Co. of Delaware.
- Becker, J. A., and Bell Telephone Labs., Inc., electron emitter, (P.), B., 67.
- Becker, J. P., photochemical changes of L-aspartic acid, L-asparagine, and chemically related substances by X-rays and ultra-violet light, A., 178.
- Becker, L., Müller, Robert, and Chem. Fabr. Pott & Co., production of water-soluble substances having capillary-active properties [wetting agents], (P.), B., 93.
- Becker, M. See Schulz, F. N.
- Becker, M. M., and Breon & Co., G. A., therapeutical preparations [antisyphilitics], (P.), B., 125.
- Becker, O. W., artificial sausage skins, (P.), B., 944.
- Becker, R., equation of state. I., A., 157.
- Becker, Rudolf. See Eucken, A.
- Becker, R. B., and Arnold, P. T. D., influence of season and advancing lactation on butterfat content of Jersey milk, B., 869. See also Neal, W. M.
- Becker, S. W. See Muir, K. B.
- Becker, Schultze & Co. See Naturin Ges.m.b.H.
- Beckert, J. See Höltje, R.
- Becket, F. M. See Electro-Metallurg. Co.
- Beckett, E. G. See Imperial Chem. Industries.
- Beckham, L. J., and Adkins, H., alcoholysis of α -diketones, A., 198. See also Sprague, J. M.
- Beckley, V. A., organic manures, with special reference to composts, B., 1158.
- Beckman, A. O. See Myers, A. E.
- Beckmann, F., permeability of frog's muscle under the influence of different substances involved in muscle metabolism, A., 239.
- Beckmann, S. See Komppa, G.
- Beckwith, M. M. See Clark, George L.
- Becraft, F. W., and Dorr Co., Inc., multiplex rotary filter, (P.), B., 387.
- Bedekar, D. N., Kausal, R. P., and Deshapande, S. S., reactivity of the carbonyl group in γ -pyrones and in γ -pyridones, A., 1378.
- Bedel, C., and Gesteau, P., absorption of ultra-violet radiations by optician's glasses, B., 992.
- Bedford, C. S., [insoluble oxazine] dyes [for silk or acetate silk], (P.), B., 718.
- Bedford, M. H., Austin, R. J., and Webb, W. L., rates of reaction of brominated malonic and succinic acid salts with the thiosulphate ion at two temperatures, A., 1207.
- Bedos, P., and Ruyer, A., constitution of Δ^3 -cyclohexene-1:2-diol; some $\alpha\beta$ -derivatives of adipic acid, A., 746.
- Bedreag, C. G., position of protons and neutrons in the natural system of elements, A., 679.
- Bedrines. See Patoir, A.
- Beebe, C. W. See Frey, R. W.
- Beek, J., jun., combining weight of collagen, A., 769. See also Wallace, E. L.
- Beekley, J. S. See Du Pont de Nemours & Co., E. I.
- Beeli, C., analysis of phosphorus sulphides, A., 1337. See also Treadwell, W. D.
- Beensen, C. H. See Warren, J. P.
- Beer, A., and Stratton, F. J. M., spectrum of Nova Herculis, 1934, A., 424.
- Beer, I. See Kissler, J.
- Beerbower, A. See Yost, D. M.
- Beers, D. N. See Morton, J. J.
- Beeson, K. C., reactions of liming materials in fertiliser mixtures, B., 866. See also Hill, W. L., and Ross, W. H.
- Beeson, W. M. See Peterson, W. H.
- Beest, van. See under Van Beest.
- Beeston, W. G., and Brown, W. R., heat treatment of ferrous or non-ferrous materials, and particularly the annealing of metallic plates, sheets, strips, etc., (P.), B., 555.
- Beet, A. E., Kjeldahl process for determination of nitrogen in coal and coke, B., 5.
- Beetz, P. See John, H.
- Beevers, C. A. See Lipson, H.
- Beger, H., oligodynamic action of metals and the "katadyn" process, B., 656.
- Begg, N. D., toxic diphtheria: significance of sugar-tolerance curves and the value of insulin, A., 650.
- Beggs, J. S. See Smith, Stanley.
- Beghelli, A., cement admixture, (P.), B., 189.
- Béguin, C., saccharides of camomile flowers. II. Biochemical examination of organs of the fresh plant, A., 906.
- Behaghel, O., and Freisenhner, H., isomerisation of phenolic ethers at high temperatures. II. Isomerisation of phenyl β -naphthylmethyl ether, A., 485. and Müller, Wilhelm, aryl selenohalides. V. Hydrolysis of aryl selenomono-halides and selenenic acids of the benzene series, A., 1257. and Schneider, Ernst, fission of ketosulphidocarboxylic acids, A., 1237.
- Behimer, O. See Texas Co.
- Behne, E. R., thermal value of bagasse, B., 1062.
- Behne, R., and Löhner, H., desorption of gases from sooted metallic surfaces in a vacuum, A., 293.
- Behnisch, R. See Slotta, K. H.
- Béhounek, F., absorption of γ -rays of radium by radioactive salts, A., 141. Transmutation of elements, and artificial radioactivity, A., 1050.
- Behr, G. E., jun., and Nat. Lead Co., refining of white-metal scrap, (P.), B., 680.
- Behr, M. A., determination of cobalt in steel, B., 551.
- Behre, C. See Remy, H.
- Behre, J., [measurement of plasticity of rubber], B., 113. Mastication of rubber, B., 468.
- Behre, J. A., and Benedict, S. R., presence of creatinine in blood, A., 1000.
- Behrend, F., recent vulcanism and the formation of iron ores, A., 727.
- Behrens, B., and Taeger, H., comparative action of adrenaline and *p*-l-sympatol, A., 539.
- Behrens, F. See Raudnitz, H.
- Behrens, M., isolated cell and tissue constituents. III. Separation of the thyroid into colloid, cells, and nuclei, A., 1003. See also Feulgen, R.
- Behrens, W. U., intake and utilisation by plants of phosphoric acid from various depth levels in soil, B., 198. Yield variations in cropping trials in cylinders, B., 199. Effect of secondary salts in potassium fertilisers, B., 688. Effect of technical progynon on plant growth, B., 821. Intake of calcium-bound phosphoric acid by plants, B., 867. See also Lemmermann, O.
- Behrisch, C., utilisation of lignite coke, B., 437.
- Behrman, A. S., and Gen. Zeolite Co., water purification, (P.), B., 480. and Gustafson, H., behaviour of oxidising agents with activated carbon [in water purification], B., 608.
- Beider, S. See Nikiforov, L.
- Beier, H. G. See Brintzinger, H.
- Beilenson, B. See Kodak, Ltd.
- Beintema, J., Terpstra, P., and Weerden, W. J. van, crystallography of pentacrythritol tetraphenyl ether, A., 1195. See also Jaeger, F. M.
- Beiswenger, G. A. See Standard Oil Development Co.
- Bekier, E., and Kijowski, S. W., catalytic action of silver ions on velocity of oxidation of manganous salts by persulphates, A., 309. Catalytic action of silver ions on the velocity of oxidation of acetone by persulphates, A., 939.
- Łukaszewicz, W., and Wejćówna, F., velocity of solution of metals in aqueous salt solutions. IV. Solution of tin in aqueous ferric chloride, A., 454. and Zelazna, Z., catalytic action of salts on velocity of ionic reactions; specific action of ions on velocity of the reaction $\text{CH}_3\text{Cl} \cdot \text{CO}_2 + \text{S}_2\text{O}_3 \rightarrow \text{S}_2\text{O}_3 \cdot \text{CH}_3 \cdot \text{CO}_2 + \text{Cl}^-$, A., 309.
- Bekk, J., horizontal porosity with the Bekk smoothness tester [for paper] as it affects smoothness, B., 17. Lateral porosity of paper, B., 222. Paper testing for printing quality, B., 490. Electricity in printing paper, B., 943.
- Bekk & Kaulen Chemische Fabrik G.m.b.H., preparing shellac solutions for production of etched photographic printing formes, (P.), B., 34.
- Bekkedahl, N. See McPherson, A. T.
- Beklemischeva, T. See Essin, O.
- Bekturov, A. See De Kolosovski, N. A.

- Bekunov, V. A., origin of coloured fog in photographic emulsions, B., 525. Influence of hydrolysis of gelatin on photographic properties of emulsions, B., 574. Determination of resisting power of gelatin, B., 574.
- Belaiev, N. T., structure and formation of lamellar pearlite, B., 633.
- Belani, E., economic and technical review of tar production, B., 708.
- Belasch, F. N., roasting, grinding, and magnetic separation of phosphorites, B., 493.
- Belcher, D. See MacInnes, D. A.
- Belcher, R., determination of fusain in coal dusts, B., 706.
- Belchetz, L., and Rideal, E. K., primary decomposition of hydrocarbon vapours on carbon filaments, A., 1085.
- Beldam, W. R. See Auto-Klean Strainers, Ltd.
- Belden, D. S., Kelley, W., and Filtrol Co. of California, neutral adsorbent [for decolorising oils and fats], (P.), B., 277.
- Bělehrádek, J., and Mládek, J., water content of the bio-plasma and the thermal coefficient of oxidation, A., 652.
- Belenitzka, D. S., determination of tannalin, B., 700.
- Belfanti, S., Contardi, A., and Ercoli, A., phosphatases. I. Influence of electrolytes on phosphatases of animal tissue; phosphatases of liver, kidney, serum, and bones of the rabbit. II. Inactivation and reactivation of phosphatases of animal organs. III. Inactivating action of sodium oxalate and phosphates on "alkaline" phosphatases of animal tissue, A., 534, 660, 1026.
- Belford, J. S. See Yorkshire Tar Distillers.
- Belgrave, W. N. C., padi manurial experiments, 1933—1934, B., 198. Manurial experiments on oil palms, B., 868.
- Beliankin, D. S., albino from Druzhnaya Gorka works with a small angle of optical axes, A., 60. Use of Dinas bricks, B., 630.
- and Filonenko, N. E., influence of mineralisers on formation of sintercorundum, B., 768.
- Belikova, M. V. See Salkind, J. S.
- Belinfante, A. H., reactions with oxygen, A., 1470.
- Beling, R. W. See Kappen, H.
- Belitzer, W. A., factors influencing autolysis of yeast cells, A., 405.
- Beljaevski, I. See Sharkov, V. I.
- Beljakova, E. See Stepanov, D.
- Belkin, S., Khotinski, I., and Boyarski, M., regeneration of moist salt used for pickling [of hides], B., 419.
- Belknap, J. R., and Fuel Process Co., fuel and treatment of fuels, (P.), B., 342.
- Bell, A. F., and Staunton, P. J., micro-organisms and raw cane-sugar deterioration, B., 518.
- Bell, A. G., sampling and analysis of coal, B., 258.
- Bell, A. M. See Bell, L. F.
- Bell, C. E., rate of decomposition of organic matter in Norfolk sand as measured by the formation of carbon dioxide and nitrates, B., 965.
- Bell, D. J., 3:6-dimethylglucose, A., 477. Fish and rabbit liver-glycogens, A., 1144. New reaction of the dichloroacetyl group in derivatives of glucose, A., 1225. Liver-glycogen. III. Molecular units of fish and rabbit glycogens, A., 1265.
- Bell, D. J., and Kosterlitz, H., liver-glycogen. II. Acyl derivatives and "regenerated glycogens," A., 1265.
- Bell, E. B., textile calgon, B., 846. See also Munter, C. J.
- Bell, F. K., infra-red absorption spectra of nitriles, A., 914.
- Bell, G. D. H., vernalisation [of grain], B., 566.
- Bell, H. See Harvey, A.
- Bell, H. S. See Trotman, S. R.
- Bell, J. See Lobb, G. W.
- Bell, J. H., fibre-water relation in paper-making, B., 447. See also Dinley, C. F.
- Bell, K. E., McDonald, Milton C., and Lawrence Leather Co., A. C., tanning of hides and skins, (P.), B., 864.
- Bell, L. V., and Bell, A. M., structural features of gold deposits in intrusives of Western Quebec, A., 1101.
- Bell, R. A. See Vickers, A. E. J.
- Bell, R. H., chemical sterilisation as a means of eradicating wart disease from the soil, B., 968.
- Bell, R. M., and Jeppesen, M. A., Raman spectrum of sulphuric acid, A., 807. See also Jeppesen, M. A.
- Bell, R. P., quantum mechanical effects in reactions involving hydrogen, A., 560. Alleged isotopic interchange between water and acetylene, A., 713. Dipole moments of isotopic molecules, A., 1304. and Arnold, M. H. M., cryoscopic study of trichloroacetic acid and its hydrate in benzene and in dioxan solution, A., 1458.
- Baughan, E. C., and Vaughan-Jackson, M. W., cryoscopy and association in *p*-chlorotoluene, A., 162. and Gatty, O., relation between molecular interaction and thermodynamic properties of solutions, A., 165. and Levinge, (Sir) R. V. H., acid catalysis in non-aqueous solvents. II. Rearrangement of *N*-bromoacetanilide in chlorobenzene catalysed by trichloroacetic acid, A., 1209. and Wolfenden, J. H., association of water and deuterium oxide in dioxan solution, A., 931. See also Edwards, A. J., and Lidwell, O. M.
- Bell, W. P. See Tweedy, W. R.
- Bell, W. W., and Celluloid Corp., [nacreous] coating composition, (P.), B., 1005.
- Bell Telephone Laboratories, Inc., Chagwidden, R. A., and Greiner, E. S., magnetic materials [aluminium-nickel-iron alloys] and heat treatment thereof, (P.), B., 857. and Ellis, W. C., electrical insulation for magnetic bodies [nickel-iron alloys], (P.), B., 108. Goucher, F. S., and Christensen, C. J., resistance-varying material, (P.), B., 639. and Russell, A. G., electrodeposition of [iron-nickel] alloys, (P.), B., 858. See also Becker, J. A.
- Bellas Processing Corporation, conversion of gases into another substance by partial oxidation, (P.), B., 661.
- Bellavia, S. See Randaccio, C.
- Bellavita, V., diphenyl series. VI. Halogenation of 2:4'-diaminodiphenyl, A., 1489. Nitrones; a new transposition reaction. I., A., 1494.
- Beller, K., Wedemann, W., and Priebe, K., influence of cold storage on hens' eggs, B., 43.
- Bellingham, W. J. See Williams, H. M.
- Bellino, P. See Ciusa, R.
- Bellis, C. J., and Scott, F. H., alteration of protein distribution, *in vitro*, between corpuscles and plasma caused by isosmotic and hyperosmotic solutions, A., 1393.
- Bellucci, I. [with Baldanzi, L.], determination of bromine in blood and in animal tissues, A., 104. and Vigni, R., determination of iodine in blood and thyroid gland, A., 104.
- Belopolski, A. P., mutual system $\text{Na}_2\text{SO}_4\text{NH}_4\text{HCO}_3\text{H}_2\text{O}$ at low temperatures, A., 928. Production of ammonium sulphate from solution without evaporation, B., 671. [with Urusov, V. F.], solubility of sodium sulphate in aqueous ammonium carbonate at 32.5°, A., 928. and Alexandrov, N. P., utilisation of natural sodium sulphate for soda and ammonium sulphate production; treatment of mother-liquors obtained in decomposition of mirabilite by ammonia and carbon dioxide, B., 145. Schpunt, S. J., and Serebrenikova, M. T., equilibria in the mutual system $\text{Na}_2\text{SO}_4\text{NH}_4\text{HCO}_3\text{H}_2\text{O}$ at 0°, A., 168.
- Belorizky, D., nebular spectrum of Nova Herculis, A., 1046.
- Belousov, A. M., and Belousova, A. G., application of flotation to qualitative analysis, A., 187.
- Belousov, M. A., effect of boron on development of sugar-beet in water cultures, A., 266. Influence of boron on growth of sugar-beet and other plants, B., 690.
- Belousova, A. G. See Belousov, A. M.
- Belov, K. See Kuznetsov, M.
- Belov, V. See Schorigin, P. P.
- Belova, A. V. See Smiragin, A. P.
- Belovodski, V. See Tabakov, Z.
- Belozersky, A. See Kiesel, A.
- Belton, J. W., surface tensions of ternary solutions. I. Surface tensions of aqueous solutions of (a) sodium and potassium chlorides, (b) sodium chloride and hydrochloric acid. II. Surface tensions of (a) ethyl alcohol-water-salt mixtures, (b) acetic acid-water-salt mixtures, A., 1317.
- Beltran, E. See Guntz, A. A.
- Beluikh, N. P. See Fljate, D. M.
- Belval, H. See Colin, H.
- Belvin, W. L. See Randolph, E. E.
- Bemelmans, E., plasticising of waste rubber containing fibrous material, (P.), B., 1105.
- Bemis, A. S., and Speer Carbon Co., impregnating carbonaceous [electrical] brushes with abrasive material, (P.), B., 1148.
- Bena Median, V. See Ostrogovich, A.
- Benade, J. M. See Compton, A. H.
- Bénard, H. See Boudouin, A., and Fiesinger, N.
- Bénard, J. See Michel, A.
- Benazzi, M., ciliary motion in relation to electrolytic equilibrium, A., 530.
- Bencowitz, I. See Bacon, R. F.
- Bender, C. B., five-years' results on pasture fertilisation and rotation management, B., 245. and Prince, A. L., effect of nitrogenous fertilisation on protein content of maize when harvested for silage, B., 244.

- Bender, H., and Pennsylvania Salt Manufg. Co., purification of caustic soda solution, (P.), B., 186.
- Bender, H. L., and Bakelite Corp., phenol[-formaldehyde] resin, (P.), B., 195.
- Bender, J. A. See Hayman, J. M., jun.
- Bender, R. C. See Supplee, G. C.
- Bendix Brake Co. See Norton, R. J., and Parker, H. F.
- Bendix-Nielsen, I. See Schou, S. A.
- Bendixen, H. A., physical changes involved in rennet coagulation of milk and subsequent firming of the curd, B., 1019. Manufacture of dairy products in Europe, B., 1066. New Minnesota Babcock test reagent, B., 1066. Lessons from monthly butter scorings, B., 1161. Manufacture of ice cream, B., 1161.
- Benecke, T., [new] Wilson's cloud chamber and determinations of the ratio of positrons to electrons on transformation of γ -rays in matter, A., 1439.
- Benedetti, E., ammonium salt of nitroso-phenylhydroxylamine as a quantitative reagent, A., 720.
- Benedetti, R. A., [constituents of] *Canechalagua panamena*, A., 133.
- Benedetti-Pichler, A. A., training in micro-chemistry and chemical microscopy, A., 1099.
- and Rachele, J. R., fractional distillation of extremely small volumes of liquids, A., 1477.
- Benedicks, C., and Borgmann, C. W., influence of gas ions on the electro-thermal homogeneous effect, A., 566.
- Benedict, F. G., degree of constancy in human basal metabolism, A., 889.
- and Fox, E. L., protein and energy metabolism of wild and albino rats during prolonged fasting, A., 112.
- and Ritzman, E. G., lability of basal metabolism of the dairy cow, A., 1150.
- Benedict, H. M., effect of ultra-violet rays on growth and on calcium and phosphorus contents of plants, A., 553.
- Benedict, S. R. See Behre, J. A.
- Benedict, W. L. See Egloff, G.
- Benedict, W. S., molecular structure of ozone, A., 14.
- See also Barnes, R. B., Bowman, P. I., Morikawa, K., and Taylor, H. S.
- Benek, J. See Liedert, F.
- Beneš, A. See Hasa, F.
- Beneschevitsch, D. See Frederiks, F.
- Beneschovsky, H. See Barrenscheen, H. K.
- Benetato, G., lipase-inhibiting action induced in rabbit serum, A., 644.
- See also Popoviciu, G., and Urechia, C. I.
- Benfield, P. J. See Fowler, S.
- Bengen, M. F., and Bohm, E., amylase test as sole means of detecting adequate holder-pasteurisation [of milk], B., 781.
- Benger, E. B. See Du Pont de Nemours & Co., E. I.
- Bengough, G. D., and Wormwell, F., design, interpretation, and uses of standard corrosion tests in salt solutions and industrial waters, B., 635.
- Bengtsson, N. See Barthel, C.
- Benhamou, E., and Gille, R., changes in the serum during malaria therapy, A., 776. Role of cholesterol in melano-flocculation (Henry reaction), A., 776. Conditions of flocculation and gelification of pathological sera, A., 1519. Index of flocculability of sera in flocculation and gelification reactions, A., 1519.
- Beninato, R. See Cannavò, L.
- Beninga, ferric oxide in the burning of fireclay, B., 101.
- Beniya, K., catalytic decarboxylation of β -keto-acids, A., 309.
- Benjamin, H. R., forms of calcium and inorganic phosphorus in human and animal sera. IV. Reply to Greenberg and Larson, A., 880.
- See also Hess, A. F.
- Benjamin, L. V. See Hulbert, H. W.
- Benjamin, M., influence of impurities in the core-metal on thermionic emission from oxide-coated nickel, A., 909.
- Benjamin, V. C., filtering material, (P.), B., 4. Apparatus for clay-treating [lubricating] oils, (P.), B., 893.
- Benjamins, C. E., Dishoeck, H. A. E. van, and German, J. L. M., active substance of grass-pollen. I. Activation of an active group of small mol. wt. by colloidal substances, A., 780.
- Benn, J. H., occurrence of vivianite in the district of Columbia, A., 842.
- Bennek, H., influence of traces of copper and nickel in ordinary steels, B., 272. Influence of phosphorus on temper-brittleness [of steel], B., 1144.
- Schenck, H., and Müller, Heinrich, origin of flakes in steel, B., 633.
- See also Houdremont, E., and Tofaute, W.
- Benner, H. P. See Universal Oil Products Co.
- Benner, R. C., Baumann, H. N., jun., and Carborundum Co., glazed refractory articles, (P.), B., 851.
- and Carborundum Co., rubber-bonded abrasive articles, (P.), B., 101, 631. Abrasive article, (P.), B., 674.
- Porter, G. H., Nelson, C. S., and Carborundum Co., rubber-bonded abrasive articles, (P.), B., 674.
- Bennet, R., and Stevenson, T., rotary filters, (P.), B., 50.
- Bennet-Clark, T. A., and La Touche, C. J., utilisation of organic acids by *Aspergillus niger*, A., 1540.
- and Woodruff, W. M., seasonal changes in the acidity of the rhubarb (*Rheum hybridum*), A., 1547.
- Bennett, A. See Kirklees, Ltd.
- Bennett, G. W., properties of the curly top virus [of sugar beet], A., 1043.
- Bennett, E. See Archibald, J. G.
- Bennett, G. M., and Reynolds, F. M., influence of variations in structure on reactivity of an alcohol with hydrobromic acid, A., 453.
- and Yuill, J. L., crystal form of anhydrous citric acid, A., 434.
- Bennett, Harry, reaction products of glycols and boric acid, (P.), B., 138. Preparation of aqueous emulsions of water-insoluble substances, (P.), B., 139. Treatment of waxes, etc., [e.g., fats and resins], (P.), B., 263.
- Bennett, Hilda, and Harwood, H. F., volumetric determination of nitrites by means of ceric sulphate solution, A., 1337.
- Bennett, H. T., and Mid-Continent Petroleum Corp., removal of wax from petroleum oils, (P.), B., 294. Sweetening of hydrocarbon products, (P.), B., 344.
- Story, Le R. G., and Mid-Continent Petroleum Corp., lubricating oil, (P.), B., 90.
- Bennett, O. G., Frazer, J. C. W., and Catalyst Research Corp., supported [e.g., gauze] catalysts, (P.), B., 66.
- Bennett, R. D., Brown, G. S., and Rahmel, H. A., frequency and magnitude of cosmic-ray bursts as a function of elevation, A., 560.
- See also Compton, A. H.
- Bennett, R. E., and Sprayo-Flake Co., insulation and fireproofing, (P.), B., 806.
- Bennett, T. H., and Matthiessen & Hegeler Zinc Co., sintering of ores and apparatus therefor, (P.), B., 66.
- Bennett, W. R. See Weiss, C. R.
- Bennett, Inc. See Becher, H. L., and Neitzke, O. F.
- Bennewitz, K., and Kellner, E., determination of p_H with the glass electrode, A., 1091.
- See also Kellner, E.
- Benoit, M. See Lasseur, P.
- Benoit, M. P. See Elliott, K. A. C.
- Benrath, A., Hartung, P., and Wilden, M., application of the thaw-melt method to binary inorganic systems, A., 1322.
- and Schackmann, H., significance of anomalous mixed crystals in determination of equilibrium in mixed salt solutions, A., 292.
- and Thiemann, W., mixed crystals in the vitriol series. IV., A., 292.
- Benshtein, I. Y., action of *l*-hyoscyamine on the human eye, B., 700.
- Bensley, R. R., and Hoerr, N. L., studies on cell structure by the freezing-drying method. V. Chemical basis of organisation of the cell. VI. Preparation and properties of mitochondria, A., 375.
- Benson, A. N., and Sawyer, R. A., lack of observed hyperfine structure in strontium, A., 2.
- Benson, H. K. See Lowen, L.
- Bent, H. E., and Dorfman, M., electron affinity of free radicals. VII. Triphenylboron and tri- α -naphthylboron. VIII. Diphenylanisylmethyl and the colour of its sodium addition compound, A., 1058, 1188. Conductance of non-aqueous solutions. I. Sodium triphenylboron and disodium tri- α -naphthylboron in diethyl ether, A., 1462.
- and Ebers, E. S., electron affinity of free radicals. VI. Strength of the carbon-carbon linking in substituted dioxanthyls, A., 1058.
- and Gould, R. G., jun., electron affinity of free radicals. V. Aromatic derivatives of dioxanthyl and *pp'*-diphenylenedi(diphenylmethyl), A., 1058.
- and Lesnick, G. J., chemical reactions of water adsorbed on glass, A., 1069.
- Bentley, L. See Mitchell, M. B.
- Benton, A. G., chitinivorous bacteria, A., 1167.
- Benz, F. See Euler, H. von, and Karrer, P.
- Benz, H. See Ruggli, P.
- Beplate, V. See Rathgeber, F.
- Ber, J., Lee's volumetric method of tannin determination, B., 70.
- Beran, C. F., Schneider, G., and Celanese Corp. of America, mixing and kneading machine, (P.), B., 1075.
- Beran, F., effect of hydrogen cyanide on fruit; action of hydrogen cyanide and stimulating substances on apples, B., 781.
- Beránek, Z. See Šimek, B. G.
- Beraud, P. See Schöen.
- Béraud, E. See Gruszewska, Z.

- Berblinger, W., pituitary changes in severe atrophy and fibrosis of the testicles, A., 542.
- Berchet, G. J. See Du Pont de Nemours & Co., E. I.
- Berchin, N. U., and Gregory, T. G., solution of cellulose, (P.), B., 667.
- Berckmans, B., news inks, B., 684.
- Berditschevski, L. G., and Vasserberg, I. G., detection of cations without the use of hydrogen sulphide, A., 317.
- Berdnikoff, A., and Champy, C., hormone content of the cock's comb, A., 1285.
- Berdolt, F., and Berdolt, M. E., preparation of waterproofing and tanning composition [rubber substitute], (P.), B., 642.
- Berdolt, M. E. See Berdolt, F.
- Beregoff, P., calcium therapy in tropical diseases, A., 1150.
- Berek, M., examination of anisotropic substances between crossed nicols [in reflected light], A., 19. Theory of examination of anisotropic substances between crossed nicols [in reflected light], A., 19.
- Berens, C. See Chapman, G. H.
- Béres, T. See Zechmeister, L.
- Beresovskaja, F., Kogon, M., and Moskalenskaja, E., combined action of ultra-violet light and platinum on transformation of fumaric and maleic acids and their salts, A., 178.
- and Semichatova, O., catalytic action of platinum and manganese dioxide on benzoyl peroxide and perbenzoic acid, A., 941.
- Beretta, A., manufacture in Italy of [vulcanisation] accelerators and antioxidants for rubber, B., 512.
- Berg, B. M. See Alkum Storage Batteries.
- Berg, C. P. See Baugness, L. C., and Cox, G. J.
- Berg, G., nature and deposition relations of quartzite schist of Kupferberg, Silesia, A., 60.
- Berg, G. A., and Holmberg, B., lignin. X. Lignin ethyl ether and thioglycollic acid, A., 1502.
- Berg, G. J. van den. See De Haas, W. J.
- Berg, L. M. van den, behaviour of resins in some solvents, B., 960.
- Berg, N. See Billmann, E.
- Berg, P., and Schmechel, S., rapid determination of arsenic and lead (insecticides) in foodstuffs, B., 875.
- Berg, Ragnar, cancer and mineral metabolism, A., 1525.
- Berg, Richard, and Roebing, W., ability of thiolacetic acid and its derivatives, particularly thiolacet- β -naphthylamide, to form complex metallic derivatives, A., 591. Sensitive detection of metals with "thionalid." [thioglycol- β -naphthylamide]. II., A., 950. Determination and separation of metals with "thionalid." II., A., 1338.
- Berg, Roman, syntheses in the aromatic-aliphatic series; phenylacetic acids with the *tert*-butyl radical in the ring, A., 342.
- Berg, S. See Andreassen, A. H. M.
- Berg, V. See Kostuitchev, S.
- Berg, W. von, bronzing lacquers, B., 1055.
- Berg, W. F., previous deformations of crystals, A., 19. Laue diagrams of deformed crystals, A., 284.
- Bergami, G., gastric and pulmonary lesions following high doses of the vasopressor fraction of the posterior pituitary hormone, A., 1284.
- Bergauer, V., Boucek, J., and Podrousek, V., changes in the chlorine ions of blood-serum under the influence of the thyroid and pituitary, A., 540.
- Stich, V., and Zlabek, Z., crystallisation of sodium chloride in serum of pregnant women, A., 1149.
- Berge, A., porcelain and glass in place of gold; manufacture of artificial teeth, B., 227.
- Berge, C. See Le Chuiton, F.
- Bergé, J., and Raffinerie Tirlémontoise Soc. Anon., centrifugal separation, (P.), B., 578. Apparatus for centrifugal separation, (P.), B., 578.
- Berge, R., and Patzsch, H., poisoning of partridges with zelio wheat and the detection of thallium, B., 1160.
- Bergedorfer Eisenwerk Akt.-Ges. Astra-Werke, pasteurising of liquids, (P.), B., 51. Centrifugal separators, (P.), B., 481. Prevention of damage to centrifuges, (P.), B., 658.
- Bergel, F. See Barger, G.
- Bergell, C., determination of free alkali in soaps, B., 31. Fitting [finishing] and the technical drying of a soap base, B., 814. Film evaporation of liquids, (P.), B., 84.
- Berger, E. See Erlenmeyer, H.
- Berger, E. K. H. See Du Pont de Nemours & Co., E. I.
- Berger, G., association and polarisability, A., 431.
- Berger, H. M., electrolytic deposition of cobalt, (P.), B., 681.
- Berger, I., and Schay, G., highly-attenuated flames of potassium and mercuric chloride vapours, A., 708.
- Berger, K. H. See Craik, J.
- Berger, L. B. See Littlefield, J. B.
- Berger, O. L., heat-requirements for sulphite pulping, B., 399.
- Berger, R. [with Perin, S.], castability of cast iron, B., 25.
- Berger, T. See Dubský, J. V.
- Berger, W. See Eucken, A.
- Bergier, M. See Pien, J.
- Berglund, T., expansion measurements on annealing hardened steel containing 1.15% of carbon, B., 904.
- Bergman, A. G., double decomposition in the absence of a solvent. XXVII. Complex mutual systems of a higher order, A., 1078. Physico-chemical study of thermo-phosphate production. I. Nature of thermo-phosphates, B., 304.
- Klementiev, V. A., and Pevzner, E. B., hydrochloric acid and magnesium oxide from waste liquors of carnallite extraction, B., 354.
- Bergman, B. See Euler, H. von.
- Bergman, D. J. See Universal Oil Products Co.
- Bergman, S. R. See Gen. Electric Co.
- Bergmann, E., migration of the quaternary methyl group during dehydrogenation of sterols and similar compounds, A., 487. Tschitschibabin condensation of butaldehyde and ammonia, A., 868. Dipole moment and molecular structure. XIV. 2:2-Difluorobisdiphenylene-ethylene, A., 1115. Mechanism of polymerisation reactions. IV. α -Phenylbutadiene, A., 1497.
- and Corte, H., migration of allyl groups in the ethyl acetoacetate series, A., 1482.
- Bergmann, E., and Hampson, G. C., dipole moment and molecular structure. XV. Spatial configuration of the allene system, A., 1115.
- and Hartrott, R., unusual case of racemisation, A., 1223.
- and Heimhold, H., rearrangement of methoxy-pyrimidines and -purines, A., 1133. Rearrangement of allyl ethers in the purine series, with some remarks on the hydrogenation of allyl ethers, A., 1509.
- and Weizmann, (Miss) A., significance of anomalous dipole moments, A., 430. Dipole moment of ethyl benzoate, A., 1304.
- Bergmann, L., simple method for demonstrating the piezo-electricity of crystals, A., 288.
- See also Schaefer, C.
- Bergmann, M., complex salts of amino-acids and peptides. II. Determination of *l*-proline with the aid of rhodanilic acid; structure of gelatin, A., 1140. Tanning of hides, (P.), B., 739.
- and Fox, S. W., complex salts of amino-acids and peptides. I. Metal complex salts of glycine and their specificity, A., 737.
- and Grafe, K., new reactions of lactobiose and cellobiose, A., 1109.
- Zervas, L., and Fruton, J. S., synthetic peptide as substrate for tryptic proteinase, A., 610. Proteolytic enzymes. VI. Specificity of papain, A., 1416.
- Zervas, L., and Ross, W. F., proteolytic enzymes. VII. Synthesis of peptides of *l*-lysine and their behaviour with papain, A., 1416.
- Bergmann, P. See Wallauschek, R.
- Bergmann, W., bombicesterol, A., 105.
- Bergon-Zini, M., and Li-Jen, Y., the antimony test and its prognostic value during and after kala-azar therapy, A., 657.
- Bergqvist, A. See Seving, F. W.
- Bergstein, M., and Micamold Radio Corp., electrolytic condenser, (P.), B., 508. Electrolytic condenser containing ethan-olamine, (P.), B., 812.
- Bergström, S., active group of heparin, A., 1519.
- Bergstrom, F. W., action of potassamide on sulphur in liquid ammonia, A., 179. Direct introduction of amino-groups into aromatic and heterocyclic nucleus. II. Reaction of isoquinoline with alkali and alkaline-earth amides in liquid ammonia, A., 223.
- See also Tainter, M. L.
- Berge, E., acid tooth paste, (P.), B., 288.
- Bergwitz, K., and Schweckendiek, O. E., use of photo-cells for determination of degree of dissociation in the gaseous equilibrium $N_2O_4 \rightleftharpoons 2NO_2$ from degree of absorption of light, A., 165.
- Berhenke, L. See Pearce, J. N.
- Beri, M. L., Narang, K. S., and Rây, J. N., vasicine, A., 1387.
- Berisso, B. See Martini, A.
- Berk, A. A., and Roller, P. S., direct determination of alkalis in Portland cement, B., 547.
- Berke, J. D., etiology and histology of dental tartars, A., 1396.
- Berkeley, C., chemical composition of the crystalline style and of the gastric shield: occurrence of the style oxidase, A., 1398.
- Berkeley, (Earl of), osmotic pressures of a mixed vapour, A., 1317.

- Berkenheim, A. M., Javorskaja, E. V., Albitzkaja, O. P., and Dankova, T. F., preparation of benzaldehyde and benzoic acid from toluene, B., 137.
- Berksey, L., total and neutral chlorine contents of gastric juice, A., 1399.
- Berkhoff, G., preparation of coarsely crystalline ammonium sulphate, B., 492.
- Berkman, (Miss) S., stability of emulsions as determined by distribution of sizes, A., 821.
See also Egloff, G.
- Berkman, Y. P., Babun, V., and Tolkachev, D., chemical-technological characteristics of the tanning material "Bestan AS," B., 70.
and Savitski, A. J., effect of substituents in the naphthalene nucleus on tanning properties of naphthalenesulphonic acids, B., 738.
- Berkner, P., green manuring, B., 1011. Is it possible to influence the nutrient intake of early, mid-season, and late varieties of potatoes by manuring with potash in different forms and at different periods? B., 1060.
- Berkovich, E. M., effect of the hydrogen carbonate ion on muscle metabolism, A., 1017.
- Berl, E., origin of natural oil, A., 324. Pressure synthesis a possibility for sulphuric acid manufacture, B., 59. Lead-chamber process, B., 354. Appliance for after-treatment of fibrous materials, in particular artificial silk wound on perforated bobbins by a suction or pressure treatment, (P.), B., 58. Manufacture of artificial threads by dry-spinning process, (P.), B., 96. Production of cellulose acetate soluble in acetone, (P.), B., 301. Wetting and emulsifying agents, (P.), B., 539.
and Weingaertner, E., state of the sorbed phase. I. Sorption velocity measurements with methane, ethane, and propane on activated carbon, A., 696.
- Berl, H. See Schöffner, A.
- Berlaga, R. J., and Gorski, F. K., velocity of crystallisation in a magnetic field, A., 1307.
- Berland, A., and Donskova, T., basal metabolism and specific dynamic action in cardiac disease and hyperthyroidism, A., 384.
- Berlie, J., determination of rancidity in flour, semolina, macaroni, etc., B., 203.
- Berlin, D. D. See Gilligan, D. R.
- Berlin, L., ammoniation of U.S.S.R. superphosphates, B., 493.
- Berliner, E., detection of wheaten flour in rye flour by the Indian-ink method, B., 425. Reliability of the meal-gluten swelling test, B., 697. Improvement of the baking quality of German wheat by the conditioner, B., 746.
- Berliner, J. F. T. See Du Pont de Nemours & Co., E. I.
- Berlingozzi, S., and Senatori, (Signa.) V., hydrophthalides. VII., A., 1246.
- Berman, L., spectrum analysis of the hot carbon star, R Coronae Borealis, A., 1046.
- Bernadiner, M. See Morgulis, N. D.
- Bernal, J. D., application of X-ray methods in the food industry, B., 173.
and Crowfoot, (Miss) D., density of small crystals, A., 21. Structure of hydrocarbons related to sterols, A., 286.
- Bernal, J. D., and Crowfoot, (Miss) D., use of the centrifuge in determining density of small crystals, A., 467. Molecular shape of calciferol and related substances, A., 1120.
and Megaw, H. D., function of hydrogen in intermolecular forces, A., 1307.
and Tamm, G., zero point energy and physical properties of H₂O and H₂O, A., 432.
- Bernard, A. See Leulier, A.
- Bernard, A. T., birefringence of dried colloidal drops, A., 581.
- Bernard, P., measurement of pressures developed by explosive substances, B., 751.
- Bernard, R., excitation of the Végard-Kaplan bands by electronic bombardment of a mixture of argon and nitrogen, A., 1045.
- Bernardbeig, J., and Caujolle, F., elimination of hydrastinine in the bile and urine, A., 1274.
- Bernardi, A., oxidation of strychnine, A., 99.
- Bernardini, R., adrenal denervation and adrenaleine hyperglycemia, A., 1283.
- Bernasconi, E. See Fierz-David, H. E.
- Bernerówna, M., stability of ergot preparations, B., 877.
- Bernhard, A., Leopold, J. S., and Dreker, I. J., blood-proteins of children. I. Distribution of total nitrogen in whole blood, red blood-cells, and serum-proteins from the same specimen. II. Distribution in the same specimen of blood of hydrolysable, amide-, humin-, basic amino-, and monoamino-nitrogen of the whole blood, red cells, and serum-proteins, A., 230, 879.
See also Dreker, I. J.
- Bernhard, K. See Flaschenträger, B.
- Bernhauer, K., and Görlich, B., interconversion of aromatic and hydroaromatic compounds by micro-organisms. II. Quinic acid and inositol, A., 1540. Oxidations by means of acetic acid bacteria. IV. Formation of 2-ketogluconic acid by *Bact. gluconicum*. V. Comparative experiments on the preparation of l-sorbose by different bacteria, A., 1541.
and Irrgang, K., oxidations by means of acetic acid bacteria. III. Formation of a reducing saccharic acid (aldehydogluconic acid) and 5-ketogluconic acid, A., 1541.
and Kürschner, K., butyl- and acetone-fermentations. I. Intermediate products of the butyl alcohol-acetone fermentation, A., 1541.
and Patzelt, G., mould sterols. I. Formation of sterols by *Aspergillus niger*, A., 1540.
and Slanina, F., chemistry and enzyme chemistry of acid formation and degradation by moulds. XI. Formation of oxalic acid from formic, glycollic, succinic, and other acids by *Aspergillus niger*, A., 124.
- Bernheim, F., oxidation of l- and d-tyrosine by the livers and kidneys of various animals, A., 1407. Action of nitrites on the intestine, A., 1534.
and Bernheim, M. L. C., purification of enzymes which oxidise certain amino-acids, A., 783.
- Bernheim, M. L. C., and Webster, M. D., oxidation of amino-acids by resting *Bacillus proteus*, A., 1028.
- Bernheim, G., use of the photo-electric barrier cell in industry, B., 461.
- Bernheim, M. L. C. See Bernheim, F.
- Bernitz Furnace Appliance Co. See Nygaard, O.
- Bernoulli, A. L., Schenk, M., and Rohner, F., kinetics of benzoilation of cellulose, A., 1227.
- Bernshtein, V. A. See Mazel, V. A.
- Bernstein, (Frl.) P., ultra-violet absorption of binary liquid mixtures. VII. System aniline-m-cresol in ethyl alcohol, A., 428.
See also Pestemer, M.
- Berolzheimer, S. M., Gamble, S. Le B., and Diamond Braiding Mills, heat treatment furnace [for brass and copper], (P.), B., 680.
- Berraz, G., action of nitrogen on metals; electric discharge at low pressures, A., 1089.
- Berrier, H. See Rose, M.
- Berrisford, S. R., and Allen, R. H., pneumatic de-dusting of coal, B., 1027.
- Berrisford, W. H., [dry] mineral separation, etc., (P.), B., 210.
- Berry, A. F., bricks, blocks, slabs, tiles, and similar articles suitable for building etc. purposes, (P.), B., 229.
- Berry, A. G. V., compositions adapted to be used as insecticides and fungicides, (P.), B., 743.
- Berry, A. J., determination of vanadium with potassium iodate, with notes on chloramine-T as an oxidising agent, A., 56.
- Berry, C. M. See Bartlett, P. D.
- Berry, G. W. See Washburn, E. R.
- Berry, P. A., and Swanson, T. B., analysis of lead arsenate, with reference to determination of arsenic content, B., 628.
- Berry, R. F., and Moon, R. L., gold separator; [amalgamating device], (P.), B., 505.
- Bersin, T., thiol nature of papain, A., 1025. Biochemistry of the heavy metals, A., 1276.
and Köster, H., influence of oxidising and reducing agents on the activity of papain. III., A., 784.
Köster, H., and Jusat, H. J., biochemical relationships between ascorbic acid and glutathione, A., 1286.
See also Köster, H.
- Bertein, F. See Auger, P.
- Bertelsmann, W., detoxification of town gas, B., 708.
- Berthelot, A., choice of culture media, natural and synthetic, A., 409.
and Amoureux, G., synthetic media suitable for study of *B. tumefaciens*, A., 409. Culture media containing peptised ground-nut oil-cake, A., 409.
Amoureux, G., and Deinse, F. van, media suitable for culture of tubercle bacillus, A., 408. Culture media prepared from peptised soya-bean oil-cake, A., 409. Use of *Stachys* root in preparation of culture media, A., 409.
- Berthelot, C., working the gold deposits of Kilo-Moto [Belgian Congo], B., 28. New era in the coal industry; scientific, technical, and commercial evolution of the coal industry in France and abroad, B., 533. Minerals and metallurgy in Sardinia, B., 951. Anthracite, semi-coke, and wood-charcoal fuel for gas producers fitted to motor lorries, B., 1123.

- Berthier, (*Mile.*) P., influence of surface tension on rate of rise of aqueous solutions in porous bodies, A., 29. Role of evaporation in imbibition by porous bodies, A., 698.
See also Boutarik, A.
- Berthold, R., taking large photographs [of faulty steel] with X-rays, B., 502.
- Riehl, N., and Vaupel, O., X-ray screens, B., 507.
- Berthoud, A., and Porret, D., photo-bromination of α -phenylcinnamic acid, A., 178.
- Berti, P., oils to prevent frothing [in beet distilleries], B., 871.
- Berti, M., See Fischer, Hans.
- Bertoliatti, J. See Rathery, F.
- Bertolo, P. P., artemisic and dihydro-artemisic acids from *desmotroposantonin*, A., 218.
- Bertonasco, E., digitoxin content of *Digitalis purpurea*, A., 673. Alkaloid content of cultivated belladonna, B., 286.
- Bertram, S. H., differentiation of refined and unrefined oils and fats by measuring the electrical resistance, B., 596.
and Kipperman, E. C. S., detergent power of soaps of claudinised fatty acids and the *cis*- and *trans*-isomerism of the unsaturated fatty acids, B., 1149.
- Bertrand, G., atmospheric sulphur and arable soils, A., 1215.
and Bhattacharjee, R. C., combined action of zinc and vitamins in animal nutrition, A., 1276.
and Ghitescu, V., elementary composition of some cultivated plants, A., 266.
and Nakamura, H., importance of manganese for animals, A., 654.
- Bertrand, H., puncture-proofing composition, (P.), B., 1104.
- Bertrand, M. F., ash content of coals and its removal, B., 659. Pure coal and its applications, B., 883.
- Bertsch, H., action of aliphatic cation-active substances on vegetable fibres, B., 301.
- Bertsch, J. A., and Monsanto Chem. Co., hydrolysis of halogenated hydrocarbons, (P.), B., 396.
- Berwick, F. W., dyeing bright shades [on cotton] without using basic dyes, B., 847.
- Berwind Fuel Co. of Delaware. See Komarek, G.
- Beryllium Corporation. See Smith, J. K.
- Berzaczky, T., and Rupilius, K., vitamin-D content of vegetable oils, A., 1036.
- Besborodov, M. A., Sokolova, A. A., and Shinké, G. A., influence of carbon dioxide on melting of glass, B., 849.
- Beskov, S. D., and Slizkovskaja, O. A., determination of nitrogen trioxide in nitrosylsulphuric acid, B., 492.
- Besselièvre, E. B., and Dorr Co., sewage treatment, (P.), B., 384. Grit-removal apparatus, (P.), B., 528. Detriting apparatus, (P.), B., 832.
- Bessey, O. A., and King, C. G., proteolytic and deaminising enzymes of *Clostridium sporogenes* and *histolyticum*, A., 407.
- King, C. G., Quin, E. J., and Sherman, H. C., normal distribution of calcium between the skeleton and soft tissues, A., 1396.
See also Campbell, H. Louise.
- Besslein, J. See Gossner, B.
- Besson, G. See Florkin, M.
- Best, C. H., and Huntsman, M. E., effect of choline on liver-fat of rats in various stages of nutrition, A., 1151.
- Huntsman, M. E., and Ridout, J. H., "lipotropic" effect of protein, A., 890.
- Maclean, D. L., and Ridout, J. H., choline and liver-fat in phosphorus poisoning, A., 1152.
See also Fletcher, J. P., and Maclean, D. L.
- Best, R. W., and Crosby, B. O., sulphur [compounds]. VII. Preparation and properties of some thioketones, A., 1241.
- Best, S. B., improvement of refining quality of raw sugars, using electrical conductivity control, B., 693.
- Best Foods, Inc. See Vahlteich, H. W.
- Bestougey, M. See Tschitschibabin, A.
- Besugli, S. P. See Brodski, A. I.
- Bethe, A., detoxication of isotonic sodium chloride solutions by potassium (but not by calcium) in certain marine *Crustacea*, A., 647.
- Bethe, H. A., influence of screening on creation and stopping of electrons, A., 274. Ionisation power of a neutrino with magnetic moment, A., 426. Annihilation radiation of positrons, A., 912. Statistical theory of superlattices, A., 1193.
and Peierls, R., quantum theory of the dipion, A., 279. Scattering of neutrons by protons, A., 678.
See also Compton, A. H.
- Bethell, F. H. See Sturgis, C. C.
- Bethke, R. M., Record, P. R., and Wilder, O. H. M., effect of equivalent units of vitamin-D in cod-liver oil concentrate and irradiated ergosterol on hatchability and vitamin-D content of the egg, A., 417.
See also Krauss, W. E., Record, P. R., and Wilder, O. H. M.
- Bethlehem Steel Co., [thermo-mechanical] treatment of metal [mild steel] sheets, etc., (P.), B., 1099.
See also Castner, W. H., and Fosdick, A. H.
- Betim, A., quantitative spectral determination of germanium in the Brazilian meteorites from Bendego and Santa Luzia de Goyaz, A., 1099.
- Bettend, E. See Grigaut, A.
- Better, E. J., and Szimkin, J., detection of fish oils, B., 68.
- Betterton, J. O., and Amer. Smelting & Refining Co., [calcium-lead] alloys, (P.), B., 107. Slag formation and reduction in lead softening, (P.), B., 362.
- Crites, R. A., Wagner, H. P., and Amer. Smelting & Refining Co., treatment of lead softener drosses, (P.), B., 362.
- Hanson, C. W., Crites, R. A., Wagner, H. P., and Amer. Smelting & Refining Co., softening lead bullion, (P.), B., 362.
- Betti, M., and Pratesi, P., resolution of *r*-glyceraldehyde, A., 67.
- Betz, H., impurities and electrically excited phosphorescence of thin Al_2O_3 layers, A., 915.
See also Günther-Schulze, A.
- Betz, M. D. See McBain, J. W.
- Beukers, M. C. F., factors which influence the behaviour of the photographic developer, B., 701.
- Beuschlein, W. L. See Conrad, F. H., and McNabney, R.
- Beute, A. E. See Backer, H. J.
- Beutel, E., and Kutzelnigg, A., colours appearing in the systems cupric chloride-hydrogen halide-water-alcohol (other, aldehyde, ketone, acid, ester), A., 167. Action of liquid bromine on cellulose, A., 478. Behaviour of cellulose towards liquid chlorine, iodine, and iodine monochloride, A., 1485. [Luminescence of pharmaceutical zinc oxide], B., 123.
- Beutelspacher, H., determination of small amounts of potassium in soil solutions, B., 688.
- Beutler, H., heat of dissociation of hydrogen molecule deduced from a new ultraviolet resonance band sequence; heats of dissociation of HH^2 , H_2^2 , and HCl , A., 135. Absorption series of argon, xenon, and krypton to terms between the ionisation limits, $2P_{3/2}$ and $2P_{1/2}$, A., 271. Absorption spectrum of hydrogen. I. Heat of dissociation of H_2 molecule determined from rotational structure at long-wave limit of absorption continuum at 850 Å., A., 1291.
- Beutler, R., determination of sucrose in small amounts of liquid by measurement of sp. gr. and specific rotation, A., 330.
- Bever, A. K. van, and Nieuwenkamp, W., crystal structure of calcium chloride, A., 1060.
- Bewley, W. F., Read, W. H., and Orchard, O. B., conditions which affect quality of tomatoes, B., 378.
- Beyer, H. See Leuchs, H.
- Beyer, R., and Beyer Corp., R., caoutchouc-like materials, (P.), B., 1155.
- Beyer Corporation, R. See Beyer, R.
- Beyers, E. See John, W. E.
- Beynon, C. E., and Leadbeater, C. J., yellow stain on tinplates, B., 458.
- Beynon, J. H. See Hinkel, L. E.
- Beythien, A., determination of water content of fruit products, B., 605. Detection of chemicals used for reddening meat, B., 971.
- Bez-Bardili, W., refraction of ultrasonic waves, A., 289.
- Beznák, A. B. L., and Hariss, Z., is the ascorbic acid content of adrenals and liver under control of nervous system? A., 263.
- Bezruchenko, N. Z. See Tziurupa, B. N.
- Bezssonoff, N., errors in determining vitamin-C by Bezssonoff's reagent, A., 670. Electrode potential of ascorbic acid, A., 706.
See also Grooten, O., and Rohmer, P.
- Bezzi, S., thermal dissociation and vapour pressure of boric acid and its volatility in steam, A., 817. Influence of sex-atomic rings on viscosity of solutions of polymericides with filiform molecules, A., 1067. Organic substances of high mol. wt.; cellulose and its derivatives, A., 1110. Constitution of [alkyl] polysulphides. I. and II., A., 1447. Vapour pressure and thermal dissociation of orthoboric acid, A., 1461.
- Bhabha, H. J., passage of very fast protons through matter, A., 143. Calculation of pair creation by fast charged particles and the effect of screening, A., 1187.
and Hulme, H. R., annihilation of fast positrons by electrons in the K-shell, A., 8.

- Bhagavantam, S.**, light scattering and Raman effect, A., 914. Structure of band spectra, A., 1187. Carbon isotope in Raman scattering. I., A., 1190. Hindered rotation and oscillation of molecules in liquids and in crystals, A., 1191. Depolarisation of the light scattered by heavy water, A., 1301. Raman spectrum of deuterium and hydrogen deuteride, A., 1445.
- and **Rao, A. V.**, rotational Raman effect in gases: carbon dioxide and nitrous oxide, A., 281. Distribution of intensity in rotational Raman spectra of gases, A., 564. Vibrational Raman scattering in liquids, A., 1054.
- Bhagvat, (Miss) K.**, proteins of Indian foodstuffs. VI. Globulins of the cowpea (*Vigna catianga*), A., 1181.
- Narayanayya, Y. V.**, and **Subrahmanian, V.**, rôle of organic matter in plant nutrition. I. Oxidation of soil organic matter, B., 37.
- and **Sreenivasaya, M.**, non-protein-nitrogen of pulses, A., 672. Dilatometric study of *in vitro* digestibility of milks, A., 1523.
- See also **Subrahmanian, V.**
- Bhalla, D. C.**, **Mahal, H. S.**, and **Venkataraman, K.**, synthetical experiments in the chromone group. XVII. Action of sodamide on *o*-acyloxyacetophenones, A., 1129.
- Bhargava, P. N.** See **Dhar, N. R.**
- Bhaskaran, T. R.**, **Narasimhamurthy, G.**, **Subrahmanian, V.**, and **Iyengar, B. P. S.**, rôle of organic matter in plant nutrition. IV. Chemical and biological transformations attendant on application of cane molasses to swamp soil, B., 116.
- Sreenivasaya, M.**, and **Subrahmanian, V.**, culture of micro-organisms on cellophane membranes, A., 1031.
- Bhat, S. S.**, leaf, flower, and fruit characters of the Santra orange (*Citrus nobilis* var. *deliciosa*), A., 1039.
- Bhatnagar, S. S.**, and **Bahl, B. S.**, diamagnetism of the tervalent bismuth ion, A., 1453.
- and **Kapur, P. L.**, magnetic rotation of salts of higher fatty acids and evidence in favour of formation of ionic micelles, A., 148.
- Kapur, P. L.**, and **Verma, M. R.**, susceptibility constants for co-ordinate linking in additive compounds. I., A., 289. Magneto-optical rotation of uranyl salts, A., 1447.
- Nevgi, M. B.**, and **Tuli, G.**, magnetic measurements on molecular compounds in solution with a modified form of Decker's balance, A., 927.
- See also **Felix, A.**
- Bhatt, C. T.**, **Nargund, K. S.**, **Kanga, D. D.**, and **Shah, M. S.**, reaction between acetylene and sulphur, A., 325.
- See also **Shah, M. S.**
- Bhatt, D. M.** See **Meldrum, A. N.**
- Bhatt, N. B.**, high-frequency spectrum of mercury vapour, A., 1184.
- and **Jatkar, S. K. K.**, recording microphotometer, A., 951.
- Bhattacharjee, S. N.** See **Ghose, M. N.**
- Bhattacharya, A. K.**, composition of Prussian and Turnbull's blues. III., A., 806.
- See also **Dhar, N. R.**, and **Mukherjee, Jnanendra Nath.**
- Bhattacharya, R.**, constitution of lac, B., 465. Identification and analysis of lac, B., 734.
- See also **Verman, L. C.**
- Bhattacharjee, R. C.** See **Bertrand, G.**
- Bialek, W.**, coagulation of colloidal cadmium sulphide, A., 444.
- Białobrzęski, C.**, and **Adamzewski, I.**, application of liquid dielectrics to the study of ionisation "jumps" produced by cosmic radiation, A., 911.
- Biasotti, A.** See **Houssay, B. A.**
- Biazzo, R.**, and **Tanteri, B.**, argentometric determination of copper, A., 463.
- Bibbins, F. E.** See **Stuart, E. H.**
- Bichler, C. H.**, and **Eyssartier, G.**, purifying liquids [e.g., fuel for internal-combustion engines by filtration], (P.), B., 4.
- Bichowsky, F. von**, finely-divided hydrated calcium sulphate, (P.), B., 187.
- Bichowsky, F. R.**, and **Kelly, G. A.**, concentrated solutions in air-conditioning, B., 976.
- Bickel, C. L.** See **Kohler, E. P.**
- Bickenbach, W.**, and **Rupp, H.**, influencing of antidiuretic and chlorine-releasing action of posterior pituitary hormone by blood-serum of pregnant and non-pregnant women (posterior pituitary theory of pregnancy toxicosis), A., 237.
- See also **Rupp, H.**
- Bicker, W.**, lactic acid content of beer, B., 650.
- Bickford, W. G.**, and **Wilkinson, J. A.**, dielectric constant and specific conductance of liquid hydrogen sulphide at 194.5° abs., A., 1304.
- Bicking, G. W.** See **Shaw, M. B.**
- Bickmore, R. C.**, gum inhibitors for gasoline and benzene, B., 1031.
- Bidder, P. B.** See **Lloyd, (Miss) D. J.**
- Bidwell, E. H.**, **Shillito, F. H.**, and **Turner, K. B.**, effect of nembul on serum-cholesterol of dogs, A., 1411.
- Bie, G. J. vander**, comparison of commercial pectins, B., 1116.
- Bieber, P.** See **Culbertson, J. B.**
- Biechler, J.**, dicyanoamides, A., 482.
- Biéchy, T.**, influence of age of flour on course of gelatinisation of rye flour, B., 1018.
- Biefeld, L. P.**, and **Harris, P. M.**, crystal structure of calcium barium propionate, A., 571.
- Biehl, K.**, and **Wittekindt, W.**, zeolitic nature of trass, B., 632.
- Biehler, W.**, surface activity and spasmolytic action, A., 526.
- Bielar, A.** See **Guyer, A.**
- Bielinski, Z. M.** See **Michalowski, E.**
- Bien, G. E.** See **Levine, V. E.**
- Bier, O. G.**, inactivation of the third component of alexin by yeast, A., 231. Possibility of a new quantitative technique of the Wassermann reaction, based on the nullifying action of the components of alexin, A., 1002. Behaviour of the fractions of alexin in the Wassermann reaction, A., 1002.
- and **Rocha e Silva, M.**, action of potassium cyanide on photodynamic hæmolysis, A., 643. Action of concentrated sodium chloride solutions on hæmolysis and fixation of erythrocytes by irradiated eosin, A., 644.
- Bierbrauer, E.**, and **Pöpperle, J.**, selective flotation of coal, B., 611.
- Bierich, R.**, and **Rosenbohm, A.**, rôle of glutathione in living tissue, A., 389. Ascorbic acid and glutathione content of rapidly growing young tissue, A., 417.
- Bierling, E.**, free carbon in coal tar. I., B., 790.
- Bierman, W.** See **Hadjopoulos, J. G.**
- Biermasz, T.** See **De Haas, W. J.**
- Bierry, H.**, and **Gouzon, B.**, fluorescence spectra of flavins of animal organs, A., 771. Fluorescence spectra of hepatoflavin before and after irradiation, A., 1145.
- Gouzon, B.**, and **Magnan, C.**, iodometric determination of blood-sugar in diabetes, A., 775.
- Bierry, M.**, and **Dumazert, C.**, utilisation of the mercury-cadmium reagent for micro-determination of lactose in milk, A., 1147.
- See also **Dumazert, C.**
- Bierstein, V.** See **Kratky, O.**
- Biert, J.** See **Stäger, H.**
- Biéth, T. C.**, separator [for cleaning gases], (P.), B., 5.
- Bietti, G.**, pharmacological action of active principles of extracts of the crystalline lens, A., 528.
- and **Carteni, A.**, ascorbic acid content of the crystalline lens of guinea-pigs on a scorbutogenic diet, A., 546. Variations of ascorbic acid in the aqueous humour following administration of vitamin-C, A., 546. Antiscorbutic properties of the aqueous humour and crystalline lens, A., 669.
- Bifano, M.**, and **Servazzi, O.**, action of different biological agents on vitamin-C. I. *Penicillium digitatum* (Pers.), Sacc., A., 1036.
- Bifen, F. M.**, and **Snell, F. D.**, analytical properties of commercial sulphated alcohols, B., 839. Analysis of commercial oil emulsions and suspensions, B., 1029.
- Bigelow, L. A.**, and **Pearson, J. H.**, action of fluorine on aromatic organic compounds. II. Fluorination of hexachlorobenzene, A., 203.
- and **Rule, H. G.**, cyclisation of 1:9-benzanthrone-8-carboxylic acid to 8:11-ketobenzanthrone, and of dibenzanthrone-8-carboxylic acid to diketodibenzanthrone, A., 859.
- Rule, H. G.**, and **Black, W. A. P.**, catalytic hydrogenation of diphenyl triketone. I., A., 346.
- Bighouse, H. H.**, and **Bartlett & Snow Co.**, C. O., incineration of garbage, (P.), B., 656.
- Bigiavi, D.**, and **Albanese, C.**, two *p*-amino-azoxybenzoic acids, A., 337. Peracetic acid oxidation of acetyl derivatives of aromatic amines, A., 854.
- Biglieri, R.**, and **Fischer, A.**, antibacteriophage properties of human sera, A., 1170.
- Biglietti, F.** See **Ponzio, G.**
- Bigourdan, P. E.** See **Souviron, P. F. J.**
- Biguria, F.**, and **Canzanelli, A.**, effect of continued oral administration of histaminase and pancreatin on gastric secretion, A., 512.
- Bigwood, E. J.**, reaction between gelatin and electrolytes in gelatin gels, A., 300.
- and **Thomas, Jacques**, oxygen consumption by fresh raw milk, A., 773. Presence of an indophenol-oxidase in fresh raw milk, A., 773. Oxidase system of milk and cytochrome, A., 884. Action of glutathione on cytochrome-C *in vitro*, A., 1538.

- Bigwood, E. J., Thomas, Jacques, and Wolfers, D., action of aldehyde-dehydrogenase of milk on cytochrome-C, isolated from yeast, A., 783.
See also Thomas, J.
- Bilimann, E., and Berg, N., betaines. I. Racemisation of ethyl propiobetainate chloride [ethyl α -trimethylammonio-propionate chloride]. II. Preparation of *N*-alkylalanine esters and betaine esters, A., 331.
- Jensen, K. A., and Jensen, H. B., betaines. III. Ethyl α -ethylpropiobetainate iodide [ethyl α -trimethylammonio- α -methyl- α -butyrate iodide] and similar compounds, A., 331.
- Bijl, A., discontinuities in energy and specific heat, A., 156.
- Bijlsma, U. G., digitalis leaves from Dr. Kerbosch [Government Quinine undertaking, Java], B., 523.
- Bijur, J., and Auto Research Corp., chassis lubricating oil and method of testing same, (P.), B., 181.
- Bijvoet, J. M., and MacGillavry, C. H., crystal structure of $\text{Hg}(\text{NH}_4)_2\text{Cl}_2$, A., 152.
- and Nieuwenkamp, W., X-ray examination of the minerals of the earth's crust, A., 724.
- and Verweel, H. J., transition point of sodium cyanide due to rotation of the CN group, A., 1060.
- Bikerman, J. J., theory of cataphoresis and electro-osmosis, A., 162. Concentration changes at membranes and electro-osmotic membrane potentials, A., 699. Specific inductive capacity of colloidal solutions, A., 700. Electrical conductivity of colloidal solutions, A., 1073.
- Bikov, M. M. See Buntin, A. P.
- Bikova, S. V. See Lobanov, D. I.
- Bilger, F. See Sobotka, M.
- Bilger, L. N., and Young, H. Y., fermentations occurring in poi manufacture, B., 1017.
- Bilham, E. G., humidity slide rule, A., 1343.
- Bilham, P., [uses of the] Zeiss photometer, B., 129.
See also Lampitt, L. H.
- Bilhuber, Inc., E. See Hildebrandt, G., and Klavehn, W.
- Bilik, I. M. See Tschuksanova, A. A.
- Bilinsky, S. See Hughes, A. L.
- Bilke, W. See Hofmann, U.
- Billborough, S. See Yorkshire Tar Distillers.
- Biller, H. See Freudenberg, K., and Kuhn, W.
- Billeter, W., hyperfine structure of the zinc resonance line 3076 Å., A., 271. Absolute intensity of the zinc resonance line 3076 Å. and the life period of the 2^3P_1 state of zinc, A., 423. Isotope displacement effect with the 3076 Å. zinc resonance line, A., 423.
- Billicet, V., and De Jong, W. F., schoepite and becquerelite, A., 1479.
- Billig, K., association in the gaseous and liquid state at the b.p., A., 815.
- Billing, L., effect of ascorbic acid on the work of the isolated surviving frog's heart, A., 1429.
- Billing, W. M. See Hercules Powder Co.
- Billings, E., Offutt, H. H., and Cabot, Inc., G. L., carbon black, (P.), B., 294.
- Billings, H. J. See Richardson Co.
- Billings, S. C. See Abbott, W. S.
- Billington, P. S., Chidester, C. H., and Curran, C. E., converting sodium sulphide into sodium carbonate in recovery of soda-base sulphite [wood] pulping liquor, B., 1042.
- Billiter, J., electrical purification of liquids, (P.), B., 813.
- Billmann, F. See Labes, R.
- Bills, C. E., ascorbic acid (vitamin-C) and photographic developing action, A., 712.
- Massengale, O. N., and Imboden, M., two forms of vitamin-D in fish-liver oils, A., 417.
- Massengale, O. N., McDonald, Francis G., and Wirick, A. M., action of activated ergosterol in the chicken. III. Existence of only one provitamin-D in crude ergosterol, A., 547.
- Billy, M., and Brasseur, P., preparation of anhydrous titanium trichloride, A., 833.
- Biltz, H., action of acetic anhydride on uric acid glycols and their others, A., 96. Miscellaneous observations, A., 762.
[with Bodenburg, and Wanderscheck], reaction of phenylhydrazine-*p*-sulphonic acid with aldehydes, A., 491.
[with Heyn, M., Mundt, H., and Damm, P.], theobromuric acid degradation of theobromine, A., 95.
- and Loewe, L., degradations of allantoin, A., 223. Action of acetic anhydride on uric acid glycols and their others. I. 1:3-, 3:7-, and 7:9-dimethyl- and 7:9-diethyl-uric acid [glycols]. II. 9-Methyluric acid [glycol]. III. 3:9-Dimethyluric acid [glycol], A., 96, 225. Acetylation and ethylation of 1:9-dimethylspirodihydroantoin and related experiments, A., 225.
- and Pardon, H., action of chlorine on methylated and acetylated uric acids, A., 360.
- Biltz, M., absolute colour-sensitivity of photographic emulsions, B., 925. The Agfa graduated colour chart, B., 975.
- and Eggert, J., relation between DIN and Scheiner speed numbers [for photographic emulsions], B., 287.
- Biltz, W., compression of metals in formation of intermetallic compounds, A., 158. Stereochemistry of solid substances, A., 1449.
- and Lemke, A., hydrothermal synthesis of carbonates, A., 49.
- and Weibke, F., special state of matter in alloys in relation to the volume, A., 1199.
- Weibke, F., and May, E. [with Meisel, K.], systematic studies in combination. LXIV. Combining power of platinum and phosphorus, A., 926.
See also Hulsman, O.
- Biluchowski, Z. Z., and Dobrowolski, R., refining of paraffin by means of ferric sulphate, B., 133.
- and Filepovicz, W., production of cylinder oils in the Polmin refinery, B., 293.
- Binder, O., and Spacu, P., complex iron thiocyanates with pyridine, A., 946.
- Binet, L., and Bargeton, D., deaminating power of the lungs, A., 113.
- and Marquis, M., pulmonary glycolysis in normal and depancreatised dogs, A., 777. Destruction of histamine by the lung, A., 783.
- Binet, L., and Minz, B., substance sensitising muscle to acetylcholine formed in the vagus nerve by electrical excitation, A., 244. Acetylcholine-sensitising substance, formed in the trunk of the pneumogastric nerve in indirect excitation, A., 656.
- and Weller, G., determination of reduced glutathione in tissue, A., 105. Determination of glutathione in tissues in the reduced form and in the oxidised form, A., 1153. Effect of starvation on glutathione of tissues: rôle of the liver in glutathione metabolism, A., 1153. Effect of temperature on glutathione content of cold-blooded animals, A., 1521.
- Bing, F. C., and Hanzal, R. F., determination of serum-iron, A., 1393.
See also Myers, V. C., and Remp, D. G.
- Bingham, E. C., and Spooner, L. W., fluidity method for determination of association. II, A., 290.
See also Geddes, J. A.
- Binney & Smith Co. See Sweitzer, C. W.
- Binnington, D. S., and Geddes, W. F., determination of naphthalene in poultry-lie powders, B., 74.
- Binns, D. See Muntwyler, E.
- Binns, F. W., decolor[is]ing of paper-machine broke [waste paper], B., 143.
- and Virginia Smelting Co., treatment of vegetable tanning agents and composition therefor, (P.), B., 469.
- Binova, E. S. See Raigorodskia, R. L.
- Binz, A., biochemistry and medicinal significance of new pyridine derivatives, A., 1156.
- and Hughes, B., sodium tri-iodomethanesulphonate, A., 1222.
- and Schickh, O. von, [3-aminopyridine], A., 1504.
- and Schickh, O. von [with Gehring, M.], pyridine. XVIII. 3-Aminopyridine and its derivatives, A., 498.
- Biocca, E., varying behaviour of blood of different animal species as regards crystallisation of carboxyhaemoglobin, A., 640. Gelation of blood with nucleated corpuscles and pathological blood, A., 1394.
- Biot, M., consolidation of charged clay particles, A., 1072. Integrability of non-linear equations of heat [transfer] and of consolidation of clay sediments, A., 1072.
- Biot, R., apparatus for determination of urea in blood-serum, A., 880.
- Bioy, E. See Loeper, M.
- Birch, C. A., methyl chloride poisoning, A., 525.
- Birch, R. E., and Harvey, F. E., forsterite and other magnesium silicates as refractories, B., 768.
- Birch, S. F. See Anglo-Iranian Oil Co.
- Birch-Hirschfeld, L., analysis of pyocyanase, A., 126.
- Birchall, T. See Imperial Chem. Industries.
- Bircher, J. R., Seyler, H. W., and Wells, J. H., treatment of manufactured gas [to remove gum-forming constituents], (P.), B., 440.
- Birkenbach, L., and Kolb, H., ψ -halogens. XXIX. Preparation, reactions, and tautomerism of cyanates and of cyanic acid, A., 851.
See also Sennewald, K.
- Bircumshaw, L. L., solubility of hydrogen in molten aluminium, A., 1316.
See also Preston, G. D.

- Bird, *C. L.*, the dry-cleaning bath. II.—IV., B., 301.
- Bird, *E. W.*, Breazeale, *D. F.*, and Sands, *G. C.*, chemistry of butter and butter-making. II. Nature of fatty materials in buttermilk and significance of certain testing methods, B., 825.
- Bird, *H. R.* See Peterson, *W. H.*
- Bird, *J. C.*, and Barol, *A.*, silver pterate, A., 126.
- Panciera, *Z.*, and Shafer, *E. G. E.*, purification of α -[2:4-]dinitrophenol, A., 339.
- See also Standard Oil Development Co.
- Bird & Sons, Ltd., A. See Field, *A. W.*
- Birge, *E. A.*, and Juday, *C.*, particulate and dissolved organic matter in inland lakes, A., 468.
- Birge, *R. T.*, value of e/m , A., 8. Velocity of light, A., 8.
- Birk, *E.* See Anton, *G.*
- Birkeland, *J. M.*, photodynamic action of methylene-blue on plant viruses, A., 269.
- Birkett, *L. S.*, solubility relationships of Trinidad sugar cane juices, B., 423.
- Birkhaug, *K. E.*, dissociation of *Mycobacterium tuberculosis*. II., A., 537.
- Birkofer, *L.* See Pummerer, *R.*
- Birmingham, *J. F., jun.*, cleaning liquid sodium-potassium alloy, A., 312.
- Birmingham Electric Furnace, Ltd., and Lobley, *A. G.*, heat treatment of metals, (P.), B., 234. [Work-batch location indicator for] heat-treatment furnaces, kilns, stoves, and similar structures or installations, (P.), B., 755. Protective or work-enveloping gases for use in heat treatment [bright-annealing] of metals, (P.), B., 955.
- Lobley, *A. G.*, and Kerfoot, *F.*, furnaces or installations for heat treatment of metal strip, (P.), B., 99S.
- Biron, *A.* See Fiessinger, *N.*
- Birrell, *K. S.*, azulene, A., 853.
- Birstein, *G.*, and Kronman, *J.*, titrimetric determination of aluminium sulphate and sulphuric acid present together, A., 186. Velocity of crystallisation and other physico-chemical properties of super-saturated arsenious acid solutions, A., 292.
- Birtley Co., Ltd. See Appleyard, *K. C.*, and Holmes, *C. W. H.*
- Biryukov, *N. D.*, Makarieva, *S. R.*, and Timokhin, *A. A.*, theory and practice of chromium-plating. I. and II., B., 678.
- See also Makarieva, *S. R.*
- Birza, *J. W.*, copaiba balsam, B., 1163.
- Bischof, *W.*, carbides in steels of low vanadium content, B., 230. Temper-brittleness [of steel], B., 359.
- See also Maurer, *E.*
- Bischoff, *F.*, and Elliot, *A. H.*, purification of calliicin, A., 788.
- and Maxwell, *L. C.*, hormones in cancer. IX. Resistance factor in normal urine affecting carcinoma 256, A., 236.
- Bischoff, *K.*, and Jamm, *W.*, use and evaluation of alloyed steel tubes for manufacture of petroleum, B., 1048.
- Biscoe, *J.* See Wyckoff, *R. W. G.*
- Bishop, *E. R.*, and Allison, *F.*, isotopes of chlorine, A., 149.
- Bishop, *L. R.*, barley varieties for brewing, B., 871.
- Bishop, *O. M.* See Du Pont de Nemours & Co., E. I.
- Biskind, *G. R.* See Glick, *D.*
- Bisonit Ges.m.b.H., and Gullich, *K.*, articles [tablets] from moulding powder, (P.), B., 1104.
- Bisset, *N.*, chronic copper poisoning in sheep, A., 657.
- Bissey, *R.*, and Butler, *O.*, effect of applications of sodium chlorate and ammonium thiocyanate on subsequent sowings of wheat, B., 165.
- See also Butler, *O.*
- Biswas, *H. G.* See Guha, *B. C.*
- Biswas, *S. C.*, induced radioactivity, A., 803.
- Biswell, *C. B.*, and Hamilton, *C. S.*, influence of the stibino-group on reactivity of nuclear chlorine, A., 876.
- Bitski, *J.*, iodometric determination of copper, A., 1094.
- Bittencourt, *A. C.*, and Barreto, *A.*, detection of nitrites [and nitrates], B., 225.
- Bitterich, *F.*, and Bakelite Corp., [resinous] condensation products, (P.), B., 685.
- Bittner, *K.*, practice and theory of protective materials in the leather industry, B., 601.
- Bixler, *A. P.*, and Advance Eng. Corp., [solder] alloy, (P.), B., 274.
- Bizard, *G.* See Polonovski, *M.*
- Bizov, *B. V.*, and Popova, *M. K.*, influence of gaseous medium on hot vulcanisation, B., 70.
- Bizunov, *I. P.*, reactivity of solid fuels at high temperatures, B., 978.
- Bizzell, *J. A.* See Lyon, *T. L.*
- Bjälftve, *G.*, nitrogen fixation by legumes in relation to nutrient content and reaction of the soil. I., B., 646.
- Bjerger, *T.*, and Westcott, *C. H.*, slowing down of neutrons in various substances containing hydrogen, A., 1186.
- See also Westcott, *C. H.*
- Bjering, *T.*, urea excretion and renal function, A., 106.
- and Iversen, *P.*, sugar threshold and renal function. I. and II., A., 111.
- Bjerregaard, *A. P.*, and Gasoline Anti-oxidant Co., refining of gasoline, (P.), B., 180.
- Bjerregaard, *M. E.*, and Houston, *B.*, amino-esters of naphthoic acid, A., 395.
- Bjerrum, *J.*, cuprammonium compounds. III. Electrometric determination of the complexity constants of cuprammine ions and of the equilibrium between cupro- and cupri-ammonium complexes in presence of copper; light absorption of cuprammine ions, A., 824.
- and Michaelis, *L.*, oxidising faculty of nitrogen oxide, A., 1085.
- Bjorneborgs Jernverks Aktiebolag, composite [ferrous] metal castings, (P.), B., 637.
- Black, *A.*, and Squibb & Sons, *E. R.*, refinement of vitamin-containing unsaponifiable matter of oils, (P.), B., 1150.
- See also Braman, *W. W.*
- Black, *A. P.*, coagulation [of water] with iron compounds, B., 127.
- Black, *C. P.* See Linen Industry Res. Assoc.
- Black, *J. C.*, hydrocarbon cracking-reaction chamber, (P.), B., 663.
- and Gasoline Products Co., Inc., low-b.p. hydrocarbons from high-b.p. hydrocarbons, (P.), B., 486. Low-b.p. hydrocarbons, (P.), B., 617.
- Rial, *W. D.*, and Gard, *E. W.*, asphaltic products, (P.), B., 214.
- Black, *J. H.*, urinary proteose in allergy, A., 514.
- Black, *L. G.*, and Amer. Potash & Chem. Corp., crystalline anhydrous borax, (P.), B., 991.
- Black, *P. T.*, anti-ketogenic substance and phloridzin diabetes, A., 1401.
- Collip, *J. B.*, and Thomson, *D. L.*, effect of anterior pituitary extracts on ketone excretion in the rat, A., 128.
- Black, *T.*, Drew, *J.*, and Molaska Corp., powdered molasses, (P.), B., 1064.
- Black, *W. A. P.* See Bigelow, *L. A.*
- Blackadder, *T.*, and Röhm & Haas Co., chrome-tanning of leather, (P.), B., 1155.
- Blackburn, *J. C.* See Kipping, *F. S.*
- Blackburn, *W. H.* See Dent, *F. J.*
- Blackman, *G. E.*, ecological and physiological action of ammonium salts on clover content of turf, A., 132.
- Blackman, *L. E.* See Pearce, *J. N.*
- Blackman, *M.*, effect of temperature on absorption of crystals in the infra-red, A., 428. Variation of dielectric constant of ionic crystals with temperature, A., 567. Theory of specific heat of crystals. I. Lattice theory and continuum theory. II. Vibrational spectrum of cubical lattices and its application to specific heat of crystals. III. Existence of pseudo- T^3 regions in specific heat curve of a crystal. IV. Calculation of specific heat of crystals from elastic data, A., 573, 690. Heat-conductivity of simple cubical crystals, A., 692.
- Blackmon, *G. H.*, and Camp, *A. F.*, relation of nitrogen absorption to food storage and growth in pecans, B., 422.
- and Ruprecht, *R. W.*, fertiliser experiments with pecans, B., 373.
- Blackmore, *H. S.* See Turner, *W. E. S.*
- Blackshaw, *H.*, azoic colours: their application to linen, technical control, and properties on the fibre, B., 541. Azoic colours on cotton: fastness properties relative to soaping after-treatment, B., 945.
- Blackwood, *O. H.* See Koppers Co. of Delaware.
- Bladergroen, *W.*, present position of *Digitalis* chemistry, A., 69.
- Blagden, *J. W.* See Howards & Sons.
- Blagonravova, *A. A.* See Drinberg, *A. J.*
- Blagovestschenski, *A. V.*, and Nikolaev, *K. A.*, reversibility of action of histozyme, A., 659.
- and Prossorovskaja, *A. A.*, influence of humic acid on absorption of mineral salts by plants, A., 265.
- Riskina, *S. R.*, and Feniksova, *R. V.*, nature of autolytic processes in silage stage, B., 118.
- and Vovtschenko, *G. D.*, influence of temperature on the activation and inactivation of yeast-proteinase in relation to the conditions of the medium, A., 660.
- Blaha, *J.* See Neoral, *K.*
- Blaine, *R. L.* See Rogers, *J. S.*
- Blair, *A. W.* See Prince, *A. L.*
- Blair, *C. A.*, extraction of raw [vegetable] tanning materials [for analysis], B., 1105.
- Blair, *G. W. S.*, thixotropy of heather honey, B., 605.
- See also Schofield, *R. K.*
- Blair, *G. Y.* See Eaton, *F. M.*
- Blair, *H.* See Smith, *O. M.*
- Blair, *H. A.* See Ray, *G. B.*

- Blair, J. M. See James, T. H., and Long, C. C.
- Blair, R. D., caryophyllene series. IV. Clovene and clovene acid, A., 1375.
- Blair, V. See Hoard, J. L.
- Blairs, Ltd. See MacLaurin, R.
- Blake, J. T., vulcanisation of rubber. VI. Thermochemistry, B., 600.
- Blake, M. A. See Nightingale, G. T.
- Blake-Smith, L. See Loenen, W. F. van, and Robinson, C. J.
- Blakely, J. D., oxidising activity of sodium hypochlorite, B., 301.
- Blakeslee, A. F., dinner demonstration of threshold differences in taste and smell, A., 1023.
- Blanc, A. C., crystallisation of aluminium nitrate obtained in treatment of leucite and similar silicates, (P.), B., 61.
- Blanc, G. A., colloidal ultra-filter containing hydrated silica, A., 1071.
- Blanchard, J. R. See Sherman, R. A.
- Blanchard, K. C., nucleic acid of the eggs of *Arbacia punctulata*, A., 376.
- and MacDonald, J., bacterial metabolism. I. Reduction of propionaldehyde and propionic acid by *Clostridium acetobutylicum*, A., 1029.
- See also Machlis, S.
- Blanchard, L., total and thyroxine-iodine of the lion's thyroid, A., 105.
- Blanchard, Louis, and Paul, R., symmetrical pentanetriol, A., 844.
- Blanchard, L. W., jun. See Kohler, E. P.
- Blanchard, M. H. See Green, A. A.
- Blanchard, R., and Boswell, P. F., additional limonite types of galena and sphalerite derivation, A., 725. Limonite of molybdenite derivation, A., 955.
- Blanchard, W. J., crystallisers applicable for sugar crystallisation, (P.), B., 1027.
- Blanche, H. W., apparatus for use in gas analysis, (P.), B., 659.
- Blanch, A., sensitive reaction for thio-sulphate ion, A., 836.
- Blanch, E., Credner, W., and Oldershausen, E. von, chemical weathering and soil formation in Siam, A., 1220.
- and Heukeshoven, W., ability of potassium oxalate to decompose phosphates [in soil], B., 72. Phosphate efficiency of the new complete fertiliser Nitrophoska (with lime) compared with that of other phosphate fertilisers, B., 325. Course of the nutrient intake of plants: potato, B., 566. The most suitable nutrient ratio for Nitrophoska (lime-bearing), B., 1109.
- and Themlitz, R., comparative study of weathering of rocks under different climatic conditions, A., 1220.
- Blanchenburg, E., and Petroleum Conversion Corp., heating system [for cracking of oil], (P.), B., 662.
- Blank, A. J., and Cement Process Corp., cementitious materials, (P.), B., 24.
- See also Cement Process Corp.
- Blank, E. W., improved heated vacuum micro-desiccator, A., 467. Low-pressure gas bubbler, A., 723. Modification of the Bunsen burette, A., 1098. Modified Soxhlet extractor, A., 1343.
- Blank, I. H. [with Partridge, R., and Schreiber, L.], action of micro-organisms on vegetable tanning materials. I. Production of lactic acid from oak-bark extract, B., 419.
- Blanke, E. See Slotta, K. H.
- Blanchenburg, C. See Dilthey, W.
- Blanks, R. F., low-heat cement, B., 591.
- Blankschtein, A. G. See Frattkin, R. L.
- Blanquet. See Armand.
- Blanton, F. S., and Spruijt, F. J., Bordeaux-oil sprays as repellents to lesser bulb fly, B., 248.
- Blaschke, E., artificial staple fibres, (P.), B., 300.
- Blaschko, H., mechanism of catalase inhibitions, A., 1415.
- Blaser, B., hydrolysis of phosphorus trichloride, A., 1333.
- Blashenova, A. N. See Schmanenkov, I. V.
- Blaszowska, Z., rapid evaporation of liquid mixtures. I. Mixtures of acetic and benzoic acids, A., 290.
- Blaszowska-Zakrzewska, H., solubility of $\beta\beta'$ -dichlorodiethyl sulphide in kerosene, B., 261.
- Blatherwick, N. R., Bradshaw, P. J., Ewing, M. E., Larson, H. W., and Sawyer, S. D., determination of tissue-carbohydrates, A., 1523.
- Blaton, J., quaternions, semi-vectors, and spinors, A., 1050.
- and Niewodniczański, H., "forbidden" lines in the Pb I spectrum, A., 1292.
- Blatt, A. H., reaction between $\alpha\beta$ -dibenzoyl- α -phenylethylene and hydroxylamine hydrochloride; a cyclic hydroxynitron, A., 355. Hydroxypolyketones. I. Alkylation of benzoylformoin, A., 982.
- See also Barnes, R. P.
- Blatt, H. See Butler, A. M.
- Blatný, C. See Straňák, F.
- Blatz, P. A., printed leather, (P.), B., 1155.
- Parti-coloured leather, (P.), B., 1155.
- Blau, H. H., and Macbeth-Evans Glass Co., controlling composition of glass, (P.), B., 23.
- Blau, M., absorption due to added substances in alkali halide crystals, A., 9.
- Influence of atmospheric oxygen on photographic bleaching out, A., 1331.
- and Wambacher, H., mechanism of desensitisation of photographic plates, A., 177. Investigation of nuclear disruption of aluminium by the photographic method, A., 1442. Photographic detection of H-rays, A., 1468.
- Blau, N. F., determination of thyroxine in thyroid substance, A., 1170.
- Blaurock, F., optical measurement of temperature of liquid iron and steel, B., 904.
- Blaw-Knox Co., cleaning, separating, or classifying granular material, (P.), B., 929.
- Blayden, H. E., and Riley, H. L., wet oxidation of carbon, B., 789.
- See also Riley, H. L.
- Blažek, Z. See Prelog, V.
- Blazsó, A. See Petranyi, G.
- Bleachers' Association, Ltd., Parker, C. S., Wall, C. L., and Farrington, F., resisting of alkaline dyeing liquors, (P.), B., 185.
- Bleakney, W., probability function for production of He^{++} by single electron impact, A., 5. Relative abundance of neon isotopes, A., 5.
- and Gould, A. J., concentration of H^+ and O^{18} in heavy water, A., 1448.
- See also Harnwell, G. P., Lozier, W. W., Manian, S. H., Selwood, P. W., and Smith, P. T.
- Bleek, J., preservatives for animal and vegetable substances, (P.), B., 645.
- Blei- & Silberhütte Braubach G.m.b.H. See Metallges, A.-G.
- Bleibler, E., spinning nozzles for production of skin or film regenerated from viscose, (P.), B., 944.
- Bleibtren, H., Eberlein, J. B., and Freyn Eng. Co., flue-gas cleaning apparatus, (P.), B., 338.
- Blench, R. O., suggested test for distinguishing between meat extract and yeast extract, B., 427.
- Blenkinsop, A., potato-sick soils in Devon and Cornwall, B., 472.
- Bley, R. S., and North Amer. Rayon Corp., viscose-spinning solution, (P.), B., 944.
- Spinning solutions for manufacture of soft-lustre rayon, (P.), B., 1138.
- Bleyer, B. See Diemair, W.
- Bleziinger, T. See Goldstein, H.
- Blicke, F. F., and Michigan University, [halogen-substituted alkylphenols: [bactericides], (P.), B., 974.
- and Monroe, E., tetraphenylarsonium halides, A., 767.
- and Oneto, J. F., phenyl- and diphenylarsines, A., 767.
- Blinov, I. F., stabilisation of chlorate explosives, B., 751.
- Blinova, A. M. See Kurin, M. V.
- Blish, M. J., and Bode, C. E., catalase activity in wheat flour, B., 650.
- and Gen. Mills, Inc., treatment of grain products, (P.), B., 252.
- See also Putnam, H. W.
- Bliss, A. R., jun., and Morrison, R. W., calcium absorption in white mice, A., 524. Absorbability of calcium compounds, A., 782.
- Rosin, Joseph, Grantham, R. I., and Blome, W. H., opium assaying. XI, B., 748.
- Bliss, C. J., comparison of dosage-mortality data [of insecticides], B., 823.
- Bliss, D. E. See Haas, A. R. C.
- Bliss, E. M. See Korany, J. A.
- Blitstein, I., effect of anticoagulants on determination of certain substances in blood, A., 1394.
- Bludov, A. P. See Rapoport, I. B.
- Blumlin, I. See Ruibak, B. M.
- Blix, G., Oldfeldt, C. O., and Karlberg, O., mucins and mucoids, A., 1267.
- See also Ohlsson, B.
- Bljacher, G. S., and Chepelevetzkii, M. L., determination of assimilable phosphoric acid in superphosphates prepared from flotation apatite, B., 60.
- Bloch, A. (Karlsruhe). See Brückner, H., and Bunte, K.
- Bloch, A. (München), measuring mechanical stresses at higher frequencies, B., 957.
- Bloch, Armand. See André, E.
- Bloch, B., and Errera, M., influence of temperature on absorption of some organic liquids in the near infra-red, A., 680.
- Bloch, Edward. See Bloch, J.
- Bloch, Eugène. See Bloch, L.
- Bloch, F., double electron transitions in X-ray spectra, A., 1184.
- and Bradbury, N. E., mechanism of uni-molecular electron capture, A., 1439.
- Bloch, J., and Bloch, Edward, [silicious] composition for use as a vehicle for other substances, (P.), B., 355.
- Bloch, L., and Bloch, Eugène, spectrum of Cu III , A., 907. Spectra of zinc, cadmium, and mercury in the extreme ultra-violet, A., 1045.
- Bloch, Eugène, and Piau, C. S., absorption spectrum of selenium dioxide, A., 1443.

- Bloch, O., problems and progress in photography, B., 254.
- Bloch, R., wound healing in *Tradescantia fluminensis*, Vell. A., 1547.
- Blochin, N. See Salkind, J.
- Blochinzev, D., light absorption in hetero-polar crystals, A., 1310.
- and Drabkina, S., theory of thermionic constants for pure metals, A., 1293.
- and Halperin, F., absorption and scattering of X-rays, A., 1184.
- Blochówna, D. See Kraszewski, W.
- Block, R. J. See Brand, E.
- Blodgett, H. M. See Booher, L. E.
- Blodgett, K. B., films built by depositing successive unimolecular layers on a solid surface, A., 931. Interference colours in oil films on water, A., 1201.
- Blom, A. V., stability of paint against atmospheric influences, B., 509. Weathering tests on paints, B., 815. Durability of paint, B., 860. Antirust paints, B., 1102.
- Blome, W. H. See Bliss, A. R., jun.
- Blomqvist, G. H. See Groth, B. S.
- Blondel, R., and Lafitte, P., constitution of antimony-tin-zinc alloys, A., 816.
- Bloodgood, D. E. See Calvert, C. K.
- Bloom, E., jun. See Rogers, R. R.
- Bloomenthal, S., non-metallic conducting films, A., 1340.
- Bloomfield, A. L., effect of feeding carrot on rat serum-protein, A., 242. Effect of protein rations on serum-protein concentration of the rat, A., 1261.
- Bloomfield, G. F., and Farmer, E. H., modified rubbers. VI. Oxidation of rubber solutions with gaseous oxygen in presence of catalysts, B., 643.
- Farmer, E. H., and Miller, C. H., composition of some chlorinated rubbers, B., 861.
- See also Rubber Producers Res. Assoc.
- Bloor, W. R., and Snider, R. H., phospholipin content and activity in muscle, A., 109.
- See also Jordan, W. R., and Matthews, V. J.
- Bloore, E. J. See Brit. Aluminium Co.
- Blotner, H., blood-fat tolerance tests in malnutrition and obesity, A., 517.
- and Fitz, R., fat tolerance tests, A., 390.
- Blount, A. L., Boardman, D. W., and Union Oil Co. of California, soluble oil, (P.), B., 485.
- Blount, B. K., veratrine alkaloids. I. Constitution of veratridine. II. Cevine, A., 505. Chemistry of insects. I. Wax of the felted beech cocoon, A., 646.
- Blow, C. M., and Garner, T. L., fatty acid softeners in rubber compounding, B., 685.
- Bloxam, H. C. L. See Dunn, J. T.
- Bludworth, J. E., Sweeney, O. R., Vilbrandt, F. C., and Hanlon-Buchanan, Inc., partial oxidation of gaseous hydrocarbons, (P.), B., 347.
- Blue, R. W., and Glaueque, W. F., heat capacity and vapour pressure of solid and liquid nitrous oxide; entropy from its band spectrum, A., 924.
- See also Dieke, G. H.
- Blue Ridge Slate Corporation. See Hillers, C. E.
- Blüh, O., dielectric constants of solutions of amphoteric electrolytes. I. Existence of zwitter ion, A., 166.
- and Kroczeck, J., dielectric constants of solutions of amphoteric electrolytes. II., A., 166, 699.
- Bluemner, E., cracking of hydrocarbons, oils, tars, and coal-oil suspensions, (P.), B., 662.
- Blum, B. See Bartels, E. C.
- Blum, H. F., and Speelman, C. R., differentiation between photosensitized and ultra-violet effects on frogs, A., 400.
- Blum, I. L., chemical and technical study of Rumanian coal basin of Banat; Rudárian anthracite, B., 5. Determination of asphaltic substances in crude petroleum, B., 7.
- and Marinescu, M., coal basin of the Jiu valley; vulcan deposits, B., 706.
- Blum, R., purification and removal of poison and odour from exhaust gases of internal-combustion engines, (P.), B., 537.
- Blum, W., and Kasper, C., structure and properties of nickel deposited at high current densities, B., 998.
- See also Strausser, P. W. C.
- Blum-Bergmann, (Mrs.) O., formation of the indene nucleus; phenylbenzylindenes, A., 1115. 7-Methyl-4-isopropyl-1-hydrindone, A., 1240.
- Blumberg, H., growth-deficiency disease, curable by wheat-germ oil, A., 418.
- Blumberg, I. B., and Kharchenko, V. N., sensitising with mixtures of dyes, B., 525.
- Blumberg, J. I., screens for three-colour photography, B., 525.
- Blumberg, O., plastic-elastic compositions, (P.), B., 69.
- Blumberger, J. S. P., azochromophore. VI., A., 207.
- Blume, A. J., periodic kiln firing, B., 270. Muffle-kiln firing, B., 270.
- Blume, H., glycogen and total carbohydrate content of the human heart, A., 105, 1004.
- Blumendal, (Miss) H. B. See Nieuwenburg, C. J. van.
- Blumenkranz, L. See Abel, E.
- Blumenthal, A., metallography of light-metal alloys, B., 154.
- Blumenthal, D., and Clarke, H. T., unrecognised forms of sulphur in proteins, A., 1140.
- Blumenthal, M., rate of decomposition of strontium peroxide, A., 41.
- and Czechiński, T., kinetics of thermal dissociation of silver nitrite, A., 1083.
- Blumenthal, M. D. See Blumenthal, S.
- Blumenthal, S., and Blumenthal, M. D., processing glacé cherries, B., 1020.
- Blumgart, H. L., and Davis, D., hypothyroidism induced by complete removal of the normal thyroid gland in chronic heart disease, A., 775.
- See also Gilligan, D. R.
- Blunden, H. See Butts, J. S.
- Blyth, J. S. S. See Greenwood, A. W.
- Boam, J. J. See Cahn, R. S.
- Boan, R. F., hydrolysis of linsced oil by fat-splitting ferments, B., 597.
- Board of Trade, and Boys, C. V., liquid-flow gas calorimeters, (P.), B., 711.
- Boardman, D. W. See Blount, A. L.
- Boas, F., ionic effects [on micro-organisms], especially anion phenomena, A., 126. Growth-stimulating substance in indigenous plants. II. Physiology, A., 1038.
- and Steude, R., action of anemonin on micro-organisms, A., 1281.
- Boas, I., approximate determination of stercoporphyryns, A., 1525.
- Boas, W., and Ekstein, H., determination of the distortion axis of bent crystals from Laue diagrams, A., 1194.
- Boatman, J. L. See Brown, P. E.
- Boatner, C. See Gilman, H.
- Bobin, P. L., application of Schott glass filters for determination of thorium by the emanation method, A., 56. Thorium-X content of water from well No. 1 in Ukhta oil-field, A., 190.
- Bobranski, B., preparation and properties of menthyl valerate, B., 78.
- Bobrov, P. A., thermal decomposition of wood with superheated steam, B., 659.
- Bobrovnik, A., chemical and petrographic examination of hardened cement, B., 950.
- Bobtelski, M., and Bobtelski-Chajkin, (Mme.) L., catalytic decomposition of hydrogen peroxide in presence of mixtures of salts of manganese and copper, A., 1466.
- and Cohen, (Mlle.) R., conditions of formation of the chloride of tervalent manganese in hydrochloric acid solutions, and its decomposition in presence of complex catalysts, A., 1466.
- Bobtelski-Chajkin, (Mme.) L. See Bobtelski, M.
- Bocciardo, G. See Bocciardo & Co., Soc. Anon., S.
- Bocciardo & Co., Società Anonima, S., and Bocciardo, G., white leather, (P.), B., 739.
- Bochwie, B. See Achmatowicz, O.
- Bock, A. See Bokelmann, O.
- Bock, A. V. See Dill, D. B.
- Bock, C. D., ions in oxygen and hydrogen, A., 5.
- Bockemüller, W., and Hoffmann, F. W., hypohalogenites of carboxylic acids, A., 1222.
- Bodansky, A., determination of plasma-phosphatase, A., 122.
- and Jaffe, H. L., phosphatase. V. Serum-phosphatase as a criterion of severity and rate of healing of rickets, A., 1149.
- Bodansky, M., effect of thyroid and thyroxine on concentration of creatine in the heart, muscle, liver, and testes of the albino rat, A., 900.
- Boddie, G. F., interpretation of urine analysis in diagnosis, A., 648.
- Boddington Breweries, Ltd. See Austin, J.
- Boddy, R. G. H. B., microscopical structure of vitrain. I. Band of vitrain occurring in bright coal, A., 61.
- Bode, C. E. See Blish, M. J.
- Bode, H., dissociation constants of dicarboxylic acids; strain relations in dicyclic systems, A., 33.
- Bodenbender, solubilities of cellulose derivatives, B., 623.
- Bodenburg. See Biltz, H.
- Bodendorf, K., mechanism of aldehyde, ketone, and ester condensations, A., 846.
- and Böhme, H., catalytic action of inorganic halides; racemisation by complex formation, A., 454.
- Bodenheimer, F. S., and Reich, K., soil protozoa, A., 124.
- Bodenstein, M., photochemistry, A., 177. Mechanism of chemical reactions, A., 1080. Catalytic combustion of ammonia, A., 1209.
- Brenschede, W., and Schumacher, H. J., photochemical formation of carbonyl chloride. VIII. Simultaneous formation of carbonyl chloride and hydrogen chloride, A., 457.

- Bodenstein, M., Jockusch, H., and Krekeler, H., electrolytic preparation of fluorine, B., 802.
- Bodenstein, P. H., and Meigs, Bassett, & Slaughter, Inc., preparation of carbon disulphide and hydrogen sulphide, (P.), B., 948.
- Bodforss, S., measurement of reaction kinetics by means of light absorption, A., 707. Apparatus for photo-electric extinction measurements, A., 722.
- and Kajmer, H., electrochemistry of magnesium, II., A., 169.
- Karlsson, K. J., and Sjödin, H., compounds of tervalent vanadium, A., 313.
- Bodger, W. H., porosity in vulcanised rubber, B., 1057.
- Bodin, V., determination of thermal characteristics of refractories, B., 1143.
- Bodine, J. H., effect of oxygen tension on oxygen consumption of a developing egg (*Orthoptera*), A., 238.
- and Boell, E. J., peroxidases and cell activity in the developing egg (*Orthoptera*), A., 1415. Enzymes in ontogenesis (*Orthoptera*). I. Tyrosinase, A., 1417.
- and Thompson, V., temperature coefficients and viscosity, A., 1405.
- and Wolkin, J. E., iron content and oxidation rates of a developing egg (*Orthoptera*), A., 238.
- Bodman, G. B., and Edlefsen, N. E., soil-moisture system, B., 198.
- Bodnár, J., Nagy, V. L., and Dickmann, A., uptake of nicotine by the human organism during smoking; fate of the nicotine, A., 656.
- Nagy, V. L., and Vecsey, T., absorption of nicotine from tobacco smoke by different absorbents, B., 1117.
- Terényi, A., and Páskuj, J., action of arsenic compounds on spores of black rust disease in wheat, A., 1281.
- Bodó, B., histidine secretion in pregnancy, A., 1011.
- Bodson, (Mlle.) E., scandium oxide bands in spectra of cold stars, A., 1188.
- Böck, F., and Lock, G., determination of chlorine in presence of bromine in organic substances, A., 101.
- Böck, J., Kaunitz, H., and Popper, H., action of pyrazolone derivatives on the vascular system, A., 1411.
- Boecker, G., manufacture and moulding of hard metal alloys and articles, especially cutting tools, draw tools, etc., made therefrom, (P.), B., 505.
- Böckh, S. See Fischer, Hans.
- Boecler, A., recovery of [volatile] solvents by condensation, B., 714.
- Boedicker, H. C., and Photo-Cylinder Corp., [photographic] production of printing surfaces, (P.), B., 288.
- Böeseken, J., configuration of derivatives of camphane, isocamphane, etc., A., 348.
- [with Asperen, van, Auchy, C., Maters, C., and Ottenhoff, P.], oxidation of unsaturated hydrocarbons by peracetic acid, A., 1103.
- and Arrias, (Mlle.) E., velocity of oxidation of sulphides and sulfoxides by peracetic acid, A., 1464.
- and Hermans, P. H., mechanism of thermal decomposition of diacyl peroxides, A., 1223.
- and Königsfeldt, J. M. L. von, oxidation of naphthols by peracetic acid, A., 614.
- Böeseken, J., and Linde, N. van der, addition of hydrogen sulphide to isoprene catalysed by ferrous sulphide, A., 1480.
- and Metz, C. F., oxidation of phenols by peracetic acid; passage from the aromatic to the aliphatic series, A., 731.
- and Pols, P., jun., microchemical determination of unsaturation by exposure to bromine vapour, A., 469.
- and Slooff, G., cyclic ethers of pyrocatechol with ketones, A., 339.
- and Zuydewijn, E. de R. van, isomerism of cyclic isoprene sulphones, A., 326.
- Boegehold, A. L., and Gen. Motors Corp., plastic bronze bearings, (P.), B., 1147.
- Böger, A., and Schröder, H., vitamin-C and plasma-proteins, A., 131. Arrest of heavy bleeding in all forms of hæmorrhagic diathesis and of hæmophilia by administration of vitamin-C ("Cebion Merck"), A., 644.
- Boeger, H. F. See Dreyer, C. B.
- Boggild, C. B. K. See under Baggild & Jacobsen.
- Baggild, J., rapid registration of small Hoffmann collisions, A., 910.
- Boggild & Jacobsen, [tempering machine for] treatment of chocolate and similar masses, (P.), B., 523.
- Böhler Gebrüder & Co., Akt.-Ges., hard-metal alloys, (P.), B., 557.
- Böhm, J., and Feldman, P., X-ray investigation of transition processes; application of Weissenberg X-ray goniometer to registration of transition processes, A., 465.
- Böhm, R., Flaschenträger, B., and Lendle, L., activity of substances from croton oil, A., 394.
- Boehm, R. M., and Masonite Corp., hard vegetable [wood] fibre product of high strength, (P.), B., 97.
- Böhme, H. See Bodendorf, K.
- Böhme, L. See Guthmann, H.
- Boehme, W. See Tammann, G.
- Böhme Akt.-Ges., H. T., manufacture and application of pyrophosphoric acid esters, (P.), B., 92. Olefine alcohols and their derivatives, (P.), B., 138. Stabilisation of peroxide solutions, (P.), B., 227. Production of a water-resisting finish on fibrous materials, (P.), B., 450. Washing agents, (P.), B., 487. Application of pigments to fibrous materials; [delustring artificial silk], (P.), B., 627. Glucosides [of higher aliphatic alcohols], (P.), B., 649. Fire extinguishing, (P.), B., 1074. [Levelling in] vat dyeing, (P.), B., 1140.
- Boehringer & Soehne G.m.b.H., C. F., manufacture of artificial silk and similar materials by the wet-extrusion process, (P.), B., 17. Cellulose derivatives, (P.), B., 58. Manufacture from cellulose esters of artificial products such as films, foils, plates, fibres, etc., (P.), B., 400. Esters from acetylene, (P.), B., 619.
- Boehlingk, A. A., bibliography of Soviet patents on petroleum, B., 1030.
- Boekenooen, H. A., constituents of vegetable oils, B., 509.
- Boeker, G. F. See Wills, A. P.
- Boekholt, K., importance of leaf-colour in breeding of white and Swedish clovers, A., 548.
- Boell, E. J., respiratory quotient of developing grasshopper embryos (*Melanoplus differentialis*), A., 889.
- See also Bodine, J. H.
- Bömer, A., Büniger, H., Helms, W., Malkomesius, P., and Meyer, D., influence of stored low- and high-fat herring meals on live-weight increase and carcase quality [of pigs], B., 922.
- Büniger, W., Helms, W., Kleberger, W., Malkomesius, P., Meyer, D., and Popp, M., influence of herring meals of high and low salt and high and low fat contents on weight increases and on carcase quality [of pigs], B., 78.
- Rintelen, P., and Malkomesius, P., influence of period and quantity of herring-meal feeding on live-weight and carcase quality [pigs], B., 922.
- Böning, K., and Böning-Seubert, E., growth and metabolism of plants with mineral salt nutrition. III. Sugar content of the press-juice of tobacco leaves in relationship to the mineral salt nutrition of plants, A., 1039.
- Böning-Seubert, E. See Böning, K.
- Boer, A. G. See Kögl, F.
- Boer, H. D., activation of filterable form of tubercle bacilli by acetone extracts of Koch's bacilli, A., 256.
- Boerlage, G. D., and Dyck, W. J. D. van, causes of detonation in petrol and Diesel engines, B., 342.
- Boerner, C. See Korn, R.
- Boersch, H., determination of structure of simple molecules by electron interference, A., 687.
- and Meyer, Lothar, investigation of effect of oxygen on graphite at high temperatures by means of electron diffraction, A., 922.
- Boese, A. B., jun., and Major, R. T., preparation and properties of dialkyl-aminoalkyl phenyl- α -naphthylcarbamates, A., 482.
- Böse, R. See Rose, H.
- Böstrom, G., anaphylactic metabolic reaction of isolated tissues, A., 116.
- Boëtius, M., and Römisch, H., preparation of *o*-nitrophenyl aryl ketones, A., 1498.
- Böttger, O. See Scholl, R.
- Böttger, S. See Spengler, O.
- Böttger, W., and Pieper, J., conductometry, A., 947.
- Bogaert, A. van. See De Jaegher, M.
- Bogatirev, S., utilisation of Bogoslovsk brown coals as metallurgical fuel, B., 1122.
- Bogatirtsehek, S. V. See Kotnitski, A. I.
- Bogdan, E. See Matei, I.
- Bogdan, P., structure of liquid substances, A., 285.
- Bogdanov, S. I., and Khyuter, F., determination of sulphuric acid in tower (sulphurous) acid, B., 59.
- Bogdanov, S. V., and Levkoev, I. I., action of hydroxylamine on naphthalene derivatives, A., 744.
- and Levkoev, I. I. [with Durmaschkina, V. V.], action of hydroxylamine on hydrogen sulphite compounds of 1-nitroso- β -naphthol-6- and -7-sulphonic acids, A., 970.
- Bogdanović, S. B., action of sodium fluoride on serum-calcium and -inorganic phosphorus in rabbits, A., 531.
- Bogen, F. See Loomis, R. N.
- Bogert, M. T., and Naiman, B., thiazoles. XX. Synthesis of benzthiazoles from aldehydes and *o*-thiolamines; action of aldehydes on zinc *o*-thiolamines and on related thiolated aromatic amines. XXI. Synthesis of indirubin types by condensation of 2-methylbenzthiazole with isatins, A., 1386.

- Bogert, M. T. See also Davidson, D., Hasselstrom, T., Marr, (Miss) E. B., Price, D., and Roblin, R. O., *jun.*
- Boggs, (Miss) E. E., and Webb, H. W., hyperfine structure of the mercury triplet $6^3P_{012}-7^3S_1$ in optical excitation, A., 1184. Intensity relations in the hyperfine structure of the optically-excited mercury line 5461 Å., A., 1438.
- Bogin, C., effect of butyl alcohol on viscosity of [cellulose nitrate] lacquer and alkyd resin finishes, B., 598. Optimum proportion of plasticisers and durability of lacquers. II, B., 913. and Commercial Solvents Corp., architectural lacquer system, (P.), B., 367.
- Bogochunaz, A. P. See Bukin, V. N.
- Bogojavlenskaja, A. N. See Kobosev, N. I.
- Bogoroditzki, N., electrical properties of paper for extra high-tension cable insulation, B., 1148.
- Bogoslovskaja, T. N. See Petrov, A. D.
- Bogtstra, J. F., treatment of boiler feed-water for oil elimination in cane-sugar factories, B., 328.
- Bogucki, M., regulation of mineral composition of blood in crayfish (*Astacus fluviatilis*, L.), A., 104.
- Bohart, G. S., and Nat. Canners Assoc., canning of foods, (P.), B., 380.
- Bohlken, S. F. See Adriaanse, D. J.
- Bohm, F. See Bengen, M. F.
- Bohm, I., direct and indirect reduction in the blast furnace, B., 150.
- Bohn, H., and Schlapp, W., determination of pressor substances in blood in pallid hypertension, A., 887.
- Schlapp, W., and Stern, K., behaviour of blood-choline in pallid and florid hypertension; determination of choline in small quantities of blood, A., 887.
- Bohn, L. J., factors influencing quality of cake flours, B., 170.
- Bohn, R. M., report on testing biscuit and cracker flours, B., 170, 1114.
- and Olson, R. S., rancidity of crackers, B., 284.
- See also Haas, L. W.
- Bohn, R. T., interpretation of standard baking test, B., 426. Milk powder for the cake-baking test, B., 651.
- Bohndorf, K. E., effect of alkaline and acid diet on oxidative processes in the body, A., 392.
- Bohner, H., under-cooling of high-melting intermetallic compounds in aluminium alloys; [system aluminium-titanium], A., 291.
- Bohnson, V. L., and Du Pont Rayon Co., cellulose acetates, (P.), B., 401.
- Swezey, F. H., and Du Pont Rayon Co., artificial thread, (P.), B., 401.
- Bohstedt, G. See Fargo, J. M., Peterson, W. H., and Phillips, P. H.
- Boinot, F. See Usines de Melle.
- Bois, E., and Nadeau, A., [enzyme from] *Acer saccharum*, A., 658.
- Boissevain, C. H., presence of fluorine in water supply of Colorado and its relation to occurrence of mottled enamel, A., 399.
- Boistel, M. See Hugel, G.
- Boitsova, Z. V., and Butkov, K. V., absorption spectrum of thallium fluoride vapour, A., 144.
- Boivin, A., and Mesrobian, L., chemical composition of the S and R forms of *B. aertrycke* and *B. gaertner*, A., 665.
- Boivin, A., and Mesrobian, L., specific substances in *B. aertrycke* and *B. gaertner*; "complete" antigen and "residual" antigen; "complete" antigen (the acid-soluble constituent of the endotoxin of the S forms), A., 665. Existence in the S and R forms of *B. aertrycke* and *B. gaertner* of an enzyme that cleaves the "complete" antigen with liberation of the "residual" antigen, A., 787. Utilisation of the "complete" antigen by living *B. aertrycke*, A., 899. Existence of "complete" and "residual" antigens in various bacteria, A., 1168.
- Bojanowski, J., Giziński, J., and Rabek, T., coumarone resins and their applications, B., 161.
- Bokelmann, O., and Bock, A., intermediary fat metabolism in pregnancy. II. Dietary fat and blood-fat, A., 1270.
- Bokij, G. B. See Nikolaev, V. I.
- Bokinik, Y. I., production of photographic images, B., 525. Hypersensitisation, B., 574.
- See also Rabinovitsch, A. J.
- Bokrétás, A. See Jendrassik, L.
- Bokunjaeva, V. I. See Kitaigorodski, I. I.
- Bolam, T. R., and Phillips, W. A., action of charcoal on aqueous solutions of silver nitrate, A., 1332.
- Bolas, B. D., influence of light and temperature on assimilation rate of seedling tomato plants, A., 549.
- and Melville, R., effect on the tomato plant of carbon dioxide produced by combustion, B., 689.
- and Selman, I. W., effect of light on growth and differentiation in tomato seedlings, A., 1038.
- Bolcato, V., influence of a buffer on activity of *Aspergillus*, A., 255. Reaction of the medium and the activity of ordinary and preformed felts of a *Aspergillus*, A., 1540. Purity of sugar extracts in relation to activity of a *Lactobacillus*, B., 39.
- Bole, G. A., cellulated clay units, B., 950.
- Bolle, P. See Briner, E.
- Bollen, W. B. See McBurney, C. H., and Powers, W. L.
- Bollenrath, F., influence of cold-work on behaviour of an austenitic silicon-manganese steel during tempering, B., 1145.
- Bolliger, A., volumetric micro-determination of calcium (precipitated as picrolonate) with methylene-blue, A., 1093. Volumetric micro-determination of *o*-nitrophenols with methylene-blue, A., 1141.
- and Goulston, E., action of picric acid on globin and haemoglobin, A., 879.
- Bollman, J. L., Mann, F. C., and Power, M. H., utilisation of galactose following complete removal of the liver, A., 1409.
- See also Pollack, H.
- Bollmann, W., new reflexion densitometer, B., 125.
- Bolotnikov, S. M., and Schräiber, M. S., substitute for litmus in pharmaceutical practice, B., 828. Examination of validol, B., 828.
- Bolotnikov, V., and Gurova, V., iodometric determination of free sulphur in rubber, B., 34. Determination of free sulphur in rubber. I. Iodometric method, B., 162.
- Bolotov, B. A., and Popova, A. N., synthesis of urea from ammonia and carbon dioxide. I., B., 12.
- See also Dolgov, B. N.
- Bolsova, G. R., non-metallic inclusions in steel, B., 1047.
- Bolsunuv, I. I., content of citric acid in different varieties of *Nicotiana rustica*, B., 1164.
- Bolt, C. C. See Backer, H. J.
- Boltjes, T. Y. K., nitrifying bacteria, A., 1167.
- Bolton, E. K. See Grasselli Chem. Co.
- Bolton, E. R., and Williams, K. A., sp. gr. of fatty oils shipped in bulk, B., 464. Colour measurement of oils and other liquids, B., 773.
- See also Technical Research Works.
- Bolton, E. W. See Chivers & Sons.
- Bolton, J. F. See Mills & Co. (Engineers), Ltd., J.
- Bolton & Sons, Ltd., T. See Anstey, H. C.
- Boltus-Goruneanu, M., refining of kerosene, B., 709.
- Boltz, H. A. See Baker, E. B.
- Bolz, F. See Noll, A.
- Bomke, H., effect of a strong electric field on light emission of para-helium in the extreme ultra-violet, A., 423.
- Bomskov, C., and Bahnsen, K., biological standardisation of adrenal cortex hormone, A., 538.
- Bon, W. F., sucking gases out of fume cupboards, A., 1219.
- Boname, G. See Soc. Franç. du Carbon-alpha & des ses Dérivés.
- Bonath, R., and Werkspoor N.V., apparatus for crystallising solutions by evaporation or cooling, (P.), B., 579.
- Bonazzi, A. See Alvarino, J.
- Bond, H. A. See Du Pont de Nemours & Co., E. I.
- Bond, J. E., papermaking, (P.), B., 491.
- Bond, M. See Widdows, S. T.
- Bond, W. N., ratio 136/137 in atomic physics, A., 804.
- Bond Electric Corporation. See Reinhardt, O. K.
- Bonde, R., potato spraying: value of late applications of magnesium-Bordeaux, B., 516.
- Bondy, C., and Söllner, K., mechanism of emulsification by ultrasonic waves, A., 820. Influence of gases on mercury emulsions prepared by ultrasonic waves, A., 820.
- Bondy, H., Johannsen, G., and Popper, K., relative frequency of isotopes of potassium and rubidium, A., 909.
- Bone, D. D. See Keeton, R. W.
- Bone, W. A., oxidation of ethane, A., 40, 324. Thermal decomposition of methyl alcohol, A., 40. Classification of coals, A., 843.
- Fraser, R. P., and Wheeler, W. H., photographic investigation of flame movements in gaseous explosions. VII. Phenomenon of spin in detonation, A., 1463.
- Parsons, L. G. B., Sapiro, R. H., and Grocock, (Miss) C. M., chemistry of coal. VIII. Development of benzenoid constitution in the lignin-peat-coal series, B., 435.
- and Tei, L. J., chemistry of coal. VII. German brown coals and Irish peat, B., 85.
- Bone, W. H., evaporation of water from cellulose, B., 299.
- Boner, C. J., dispersion of metallic soaps in fatty acids, B., 732.

- Bonfield, H. T. See Universal Products Corp.
- Bonhoeffer, K. F. See Bach, F., and Reitz, O.
- Bonhöte, G. See Soc. Chem. Ind. in Basle.
- Bonicatti, M., determination of weighted dyed silk by ashing, B., 401. Micro-Kjeldahl [method] in analysis of silk thread and textiles, B., 665.
- Bonichon. See Brus, G., and Dupont, G.
- Bonine, C. E., and Underpinning & Foundation Co., Inc., [electrolytic] treatment of liquids, (P.), B., 30.
- Bonino, G. B., Raman spectra of double linkings conjugated in a nucleus, A., 564. Structure of nuclei of aromatic character, A., 810. Molecular structure of benzene, A., 1057.
- and Manzoni-Ansidei, R., Raman effect in organic substances, A., 11, 1054. Raman spectrum of $\Delta^{1,3}$ cyclohexadiene, A., 807.
- Bónis, I., iodine metabolism and thyroid activity, A., 1423.
- Bonne, C. See Spengler, O.
- Bonneau, P. E. See Arnulf, A. J.
- Bonnefoi, A. See Machebeuf, M. A.
- Bonnell, D. G. R., and Burridge, L. W., dissociation pressures of salt hydrates, A., 302.
- See also Wilsdon, B. H.
- Bonnell, L. S. See Standard-I.G. Co.
- Bonner, J., colloidal properties of pectins, A., 702. Pectins, B., 378.
- and Thimann, K. V., growth-hormone of plants. VII. Fate of growth-substance in the plant and nature of growth process, A., 1039.
- See also De Jong, H. G. B.
- Bonner, T. W., and Brubaker, W. M., energy spectrum of neutrons from disintegration of beryllium by deuterons, A., 1049.
- See also Brubaker, W. M.
- Bonnet, H., and Thieffry, S., production of staphylococcus toxin, A., 665.
- Bonnet, J. A., and Villamil, F. A., Dyer's modified method for determining in soils the phosphoric acid, lime, and potash soluble in 1% citric acid solution, B., 244.
- Bonnet, L., are synthetic dyes toxic? B., 298.
- Bonnet, P. See Lefrpu, G.
- Bonnet, R., and Jacquot, R., influence of anti-oxidants, of methylene-blue, and of 2:4-dinitrophenol on growth and energy output of *Aspergillus niger*, A., 255. Formation of intermediate products in growth of *Aspergillus niger* as a function of age of the mycelium, A., 1027.
- Bonney, R. D., Egge, W. S., and Congoleum-Nairn, Inc., protective coating compositions, (P.), B., 466. Linoleum [cement], (P.), B., 1154.
- Maguire, J. F., and Congoleum-Nairn, Inc., [thermoelastic fibrous] tile composition, (P.), B., 1154.
- Bonney-Floyd Co. See Gregg, A. W.
- Bonsack, W., and Nat. Smelting Co., aluminium-base alloys [for pistons], (P.), B., 274. [Flux for the] preparation of aluminium alloys, (P.), B., 315.
- Bonsignore, A., ascorbic and dehydro-ascorbic acids in the aqueous humour under the action of light, A., 1176.
- and Pinotti, F., ascorbic acid and adrenaline, A., 1176.
- See also Martini, E.
- Bonsma, F. N., and Joubert, P. J., sulphur content of merino wool, its distribution and relation to fineness and quality, B., 843.
- Bonte, H., permeability of plant cells, A., 419.
- Bonyun, M. E., protecting pressure vessels with rupture discs, B., 609.
- Bonzel, M., deformations accompanying thermal treatment of twisted metals, B., 997.
- Booe, J. M., and Mallory & Co., Inc., P. R., dialysing paper condenser, (P.), B., 1100.
- Boover, J. R. See Weston, W. A. R. D.
- Booher, J. E., and Rollefson, G. K., photobromination of acetylene, A., 48.
- Booher, L. E., concentration and chemical nature of vitamin-B₂, A., 130.
- Blodgett, H. M., and Page, J. W., growth-promoting properties of vitamin-B₂ concentrates, A., 130.
- Booker, H. G., magneto-ionic theory, A., 144.
- Boomer, E. H., and Saddington, A. W., hydrogenation of Alberta coals. I. Experiments on suspension media and catalysts with three coals, B., 789.
- Saddington, A. W., and Edwards, J., hydrogenation of Alberta coals. II. Comparative data on thirteen coals of various ranks and two suspension media, tetralin and liquid paraffin, B., 1079.
- Boon, W. L., preparation, marketing, and utilisation of coke, B., 612.
- Boonton Research Corporation. See Cobb, H. L.
- Boorman, E. J., and Linstead, R. P., olefinic acids. XVI. Additive reactions and tautomeric changes of cyclic unsaturated acids, and analogous observations on α -methylpentenoic acids, A., 617.
- Boorse, H. A., and Niewodniczański, H., electrical resistance of pure aluminium at liquid helium temperatures, A., 814.
- Boot, H. L. G., and Ward, A. M., determination of free sulphur and tar in spent oxide, B., 535.
- Booth, C. F., and Swann Res., Inc., amiodiphenyls, (P.), B., 183. Benzidine and other arylamines, (P.), B., 183. Waterproofing and fire-retarding composition, (P.), B., 848.
- See also Kilbourne, K. A.
- Booth, F. J., water-soluble precursor of choline found in the kidney and other tissues, A., 1265. Microchemical test for choline and its esters in tissue extracts, A., 1290.
- Booth, H. S., and Torrey, G. G., artificial refrigeration, (P.), B., 833.
- Booth, L. M., paper-machine water, B., 265.
- Booth, R. D. See Standard Oil Development Co.
- Booth, R. G., Kon, S. K., Dann, W. J., and Moore, T., seasonal variation in butterfat. II. Seasonal spectroscopic variation in fatty acid fraction, A., 241.
- Kon, S. K., and Gillam, A. E., relative biological efficiencies of vitamin-A and carotene of butter, A., 260.
- See also Dann, W. J.
- Booth, V. H., identity of xanthine-oxidase and Schardinger enzyme, A., 1162.
- Boothby, W. M. See Adams, M.
- Boots Pure Drug Co., Ltd., Pyman, F. L., and Easson, A. P. T., organic bismuth salts, (P.), B., 524.
- Pyman, F. L., and Garforth, B., histamine and its derivatives, (P.), B., 839.
- Boots Pure Drug Co., Ltd., Pyman, F. L., and Levene, H. L. L., alkylamines [ω -tetra-alkylalkylenediamines; amebicides], (P.), B., 973.
- Boppel, A. See Kraeber, L.
- Boquet, A., and Laporte, R., properties of the tuberculin extracted from bacilli by serum and organic liquors, A., 1170.
- Bor, J. See Lowery, H.
- Boratyński, K. See Glixelli, S.
- Borehard, K. H., influence of the mould on strength [of moulded glass articles], B., 673.
- Borchers, E., and Bryde, O., shortening time of digestion in sulphite process by pretreatment of wood, B., 221.
- Borchers, H., and Hermanns, G., rusting of speiss due to oxidation, B., 1146.
- See also Keppeler, G.
- Bordas, J., action of urea on colloid suspensions [of insecticides], B., 473.
- Borden, A. D., and Hensill, G. S., comparison of oil deposits of proprietary [insecticidal] oil emulsions, B., 247.
- Bordet, P., serum reaction to resorcinol, rate of corpuscular sedimentation, and time of serum lactogelification, A., 1519. Abscess of fixation and serum reaction to resorcinol, A., 1519.
- Bordner, E. R. See Rank, D. H.
- Bordny, M. L. See Greenberg, B. E.
- Boreman, R. W. See Hetzler, C. W.
- Borén, B., Ståhl, S., and Westgren, A., crystal structure and composition of rhombic cobalt silicide, A., 1194.
- Borg-Warner Corporation. See Lyman, K. E.
- Borgatti, G., cholesterol and cholic acid in lung autolysis, A., 533.
- Borger, G., and Mayr, T., pathological physiology of infarct. II. Proteolytic activity of infarct tissue, A., 1269.
- Borghello, V. N. See Sandonini, C.
- Borghetti, E. See Tuffi, R.
- Borghetty, H. C., treating rayon fabrics; sizing ingredients that are partly or wholly insoluble and those that are soluble or emulsifiable, B., 401.
- Borgianni, A., determination of acidity of synthetic tannins, B., 916.
- Borglin, J. N. See Hercules Powder Co.
- Borgmann, C. W. See Benedicks, C.
- Borgström, G. A., (a) citrates occurring in some species of *Kleimia*, a new succulent type; (b) citrates in succulent plants, A., 1550.
- Borisiuk, J. G., and Ladvez, E. E., distillation of essential oils, B., 286.
- See also Valiaschko, N. A.
- Boriso, P. P., Schachnazarova, E. M., and Margolis, E. I., thermal decomposition of hydrocarbons, A., 727.
- Borkovsky, A. A., and Porfiriev, N. A., determination of SO₄^{''} in soluble fluorides, A., 463. Determination of sodium silicofluoride in cryolite, B., 21.
- Borkowsky, A., treatment of soya beans, (P.), B., 923.
- Borloz, A. See Amstutz, A.
- Bormann, J. See Moczariski, Z.
- Bormann, J. E., influence of rape oil on iodine value of pig's fat, B., 172.
- Born, H. J., and Mumbrauer, R., simple test for formation of complex lead alkali halides, A., 317.
- See also Hahn, O.
- Born, M., theory of optical activity. I. General theory of a system of coupled isotropic oscillators. II. Molecules with a binary axis of symmetry, A., 917.

- Born, M.**, and **Infeld, L.**, quantisation of the new field theory. II, A., 912.
and **Thompson, J. H. C.**, spectrum of the frequencies of a polar crystal lattice, A., 284.
- Born, S.**, dry-cleaning composition, (P.), B., 185.
- Bornand, M.**, microcrystallographic examination of blood in forensic medicine, A., 640.
- Bornhofen, O.**, grey cast iron as a material for glass moulds, B., 673.
See also **Söhnchen, E.**
- Borodin, P. R.**, and **Gadd, M. G.**, radio-activity of the springs of the Ilmen district and of Lake Turgoyak (South Urals), A., 953.
- Borodina, O. Y.**, separation of lignin-sulphonic acids from sulphite-cellulose liquors, B., 95.
and **Tarasenko, N. P.**, salting-out vat solutions of domestic tannides, B., 419.
- Boroditzkaja, R. I.**, analysis of aluminosilicates, B., 493.
- Borodulin, L.**, use of chlorinated rubber as an anticorrosive material, B., 468.
- Borodulin, M. V.**, and **Levina, E. J.**, generation of hydrogen from aluminium, sodium carbonate, and quicklime, B., 355.
and **Nemtschinova, V. R.**, rust-proof material in the carbon dioxide treatment of waste material in the soda industry, B., 990. Organic protective coatings as applied to phosphatised [iron] articles, B., 994.
and **Romanovskaja, R. I.**, resistant mortars applicable to the calcium chloride industry, B., 852. Materials for equipment in the calcium hypochlorite industry, B., 990. Protecting iron tanks against corrosion by chlorine during electrolysis of salt solutions, B., 1048.
- Borodulina, J. S.**, influence of calcium cyanamide on nitrification in podsol soils, B., 687.
- Borofski, H.**, colloid mixtures comprising metals and non-alloyable additive materials, (P.), B., 1098.
- Borozelina, A. S.**, burning qualities of tobacco, B., 124.
- Borradaile, T. A.**, and **Alkaline Earths Co.**, manufacture of ammonium chloride and calcium sulphate, (P.), B., 672.
- Borrel, C.** See **Cornubert, R.**
- Borries, G.** See **Reif, G.**
- Borrmann, C. H.**, new German cracking process [for petroleum oil], B., 886.
- Borrmann, G.**, X-ray source in a single crystal, A., 1193.
- Borruat, L. A.**, use of gas oils in explosion motors, B., 837.
- Borshkovski, S. E.**, and **Guli, M. F.**, proteolysis in silo from leguminous plants, B., 1162.
- Onoprienko, I. S.**, and **Tscherkasova, L. S.**, biological value of the protein of dry diffusion residues in the beet sugar industry, A., 1529.
and **Tscherkasova, L. S.**, adjustment of the mineral nutrition of test animals during investigation of the biological value of proteins, A., 1531.
See also **Palladin, A. V.**
- Borsook, H.**, micro-methods for determination of ammonia, carbamide, total nitrogen, uric acid, creatinine (and creatine), and allantoin, A., 1140.
- Borsook, H.**, correlation between excess calories and excess urinary nitrogen in the specific dynamic action of protein in animals, A., 1152.
and **Jeffreys, C. E. P.**, nitrogen metabolism of the isolated tissues of the rat, A., 1152.
- Borst, M.**, experimental uterus growth by ovarian hormone, A., 542.
- Borsuk, V.**, **Vershbinskaja, N.**, **Kreps, E.**, **Michelson, N.**, and **Streltsov, V.**, influence of sympathetic stimulation on chemical composition and physico-chemical properties of striated muscle, A., 645.
- Bortner, C. E.**, toxicity of manganese to Turkish tobacco in acid Kentucky soils, B., 282.
See also **Karraker, P. E.**
- Bortz, E. L.**, metabolic stimulants with special reference to sodium dinitrophenoxide, A., 655.
- Borvisk Syndicate, Ltd.**, and **Borzykowski, B.**, manufacture of artificial structures from cellulose, (P.), B., 799.
- Borzdika, A. M.**, and **Orlov, N. M.**, hardness of metals at high temperatures, B., 272.
- Borzykowski, B.** See **Borvisk Synd., Ltd.**
- Bosanquet, C. H.** See **Imperial Chem. Industries.**
- Bosch, R.**, preparation of refractories, (P.), B., 455.
- Bosch, A.-G., R.**, filtering apparatus for liquids, (P.), B., 658.
- Bose, A.**, Weiss constant of paramagnetic ions in the S-state. I. Aqueous solutions of manganous salts. II. Aqueous solutions of ferric salts, A., 814.
- Bose, A. C.**, sterol iodine values of oils and fats by the Bolton and Williams method, B., 464.
and **Bagchi, K. N.**, colorimetric determination of small quantities of iodide in presence of other halides, A., 595.
- Bose, D. M.**, magnetic and Raman spectra evidence on structure of complex cyanides, A., 681.
and **Raha, P. K.**, photomagnetism, A., 915.
- Bose, M. K.** See **Bardhan, J. C.**, and **Rây, P. R.**
- Bose, P. K.**, active principle of *Piper chaba*, Hunter, A., 1434.
- Bosin, A. G.**, stable concentrated preparations of *Adonis vernalis*, B., 828.
- Bosing, E. A.**, and **Buffalo Electro Chem. Co., Inc.**, treatment of hydrocarbons, (P.), B., 215.
- Bosqui, F. L.**, and **Rhokana Corp., Ltd.**, treatment of cobalt-containing material [slag], (P.), B., 156. Cobalt, (P.), B., 156. Ferrocobalt, (P.), B., 156, 314.
- Boss, A. E.** See **Pittsburgh Plate Glass Co.**
- Bossányi, I.** See **Kiss, A. von.**
- Bossche, M. van den**, and **Manneback, C.**, fundamental oscillations of molecules of the type X_6 and X_6Y_6 , A., 150.
- Bosshard, M.**, influence of cerium on aluminium alloys, B., 771. Distinguishing the common light-metal casting alloys, B., 905.
- Bosshard, W.**, *D*-talose, diacetone (diisopropylidene-*yl*-talose, and diacetone (diisopropylidene-*yl*-talonoalactone, A., 734. *l*- β -Methylxylonic acid, A., 1106.
and **Reichstein, T.**, 4-methyl-*l*-sorbose, A., 1109.
See also **Reichstein, T.**
- Bossing, E.**, regeneration of lubricating oils, B., 791. Removal of caffeine from coffee, B., 875.
- Bosso, V.**, **Silvestrini, N.**, **Sacchi, F.**, and **Botta, G.**, production of materials, decorative articles, and protective linings, etc., by transformation of fibrous cellulose materials, (P.), B., 668.
- Bossuet, R.**, quantitative spectrographic analysis of alkali metals; application to caesium in mineral waters, A., 719.
- Bost, R. W.**, and **Conn, M. W.**, action of sodium sulphide on polymethylene halides and formation of "polythiophans," A., 757.
and **Nicholson, F.**, colour test for identification of mono-, di-, and tri-nitro-compounds, A., 877.
- Bostock, H.**, apparatus for preserving food-stuffs, pelts, etc., for tanning pelts and hides and curing pig meat, and for drying and impregnating timber, and drying milk, grass, fruit, vegetables, etc., (P.), B., 929.
- Boston, O. W.**, and **Kraus, C. E.**, performance of cutting fluids when sawing various metals, B., 153.
- Boston Blacking & Chemical Co.** See **Bacon, F. S.**, and **Wedger, W. H.**
- Boston Woven Hose & Rubber Co.**, [apparatus for continuous] vulcanisation of rubber articles, (P.), B., 777.
- Boswell, P. F.** See **Blanchard, R.**
- Bosworth, A. W.**, and **Sisson, E. W.**, arachidonic acid in butter-fat, A., 106.
- Bosworth, R. C. L.**, mobility of sodium on tungsten, A., 909.
- Botecchia, G.**, volume changes in mixtures of benzene and chloroform, A., 1456.
- Botelho, J. C.**, port wine, B., 425, 744.
- Botella-Llusiá, J.**, urea production in the human placenta, A., 1265.
- Bothe, W.**, β -radiation of polonium, A., 1440.
See also **Wollschitt, H.**
- Botschwar, A. A.**, mechanism of eutectic crystallisation, A., 23.
- Botset, H. G.**, radium content of connate waters, A., 322.
- Botson, R.**, impregnation of hides, skins, leather, and fibrous or porous materials with a colloidal solution of rubber, (P.), B., 371.
- Bott, P. A.**, and **Wilson, D. W.**, lactic acid formation in liver, A., 892. Concentrations of lactic acid in blood and liver of rabbits, A., 892.
- Botta, G.** See **Bosso, V.**
- Bottema, J. A.**, determination of small quantities of radium in minerals, A., 1215.
- Botterell, E. H.**, and **King, E. J.**, phosphatase in fractures, A., 1026.
- Bottin, J.**, chlorine metabolism, A., 115.
- Bottomley, A. C.**, and **Twort, C. C.**, carcinogenicity of chrysene and oleic acid, A., 382.
- Bottomley, G. H.**, **Cavanagh, B.**, and **Polanyi, M.**, enzyme catalysis of the exchange of deuterium with water, A., 1084.
- Bottoms, R. R.**, and **Girdler Corp.**, separation of acidic gases [e.g., hydrogen sulphide and carbon dioxide from air or flue gas], (P.), B., 992. 1:3-Diamino-2-propanol [α -diaminopropyl alcohol], (P.), B., 1130.
- Bottu, H.**, properties of the alkaline persulphates, A., 1334.
- Boucek, J.**, lactogelification of blood-sera of immunised animals, A., 1143.
See also **Bergauer, V.**

- Bouchal, F., and Dolejšek, V., application of Valouch's method of measuring constants of crystal lattices to precision method of Kunzl and Köppel, A., 15.
- Bouchard, J. See Achard, C., and Boutaric, A.
- Boucher, P. E., contrast variation obtained with the chromium [photographic] intensifier, B., 1069.
- Bouchet, L., properties of very pure zinc compared with those of other samples of zinc, B., 678.
- Bouckaert, J. P. See Lacquet, A.
- Bouckaert, L. See Lemaitre, G.
- Bouffe, G. F. J., artificial filaments, (P.), B., 491. Apparatus for [carrying along the film in the] manufacture of artificial yarns, (P.), B., 669. Artificial yarns, (P.), B., 720.
- Bougault, J., and Cattelain, E., highly sensitive reaction for characterisation and determination of citral, A., 733. Silver-mercuric complex, A., 944.
- and Schuster, G., composition of cacao butter; partial hydrolysis of mixed azelaic glycerides, A., 64.
- Boughay, H. E., application of electro-deposition to printing, B., 105.
- Boughton, W. A., and New England Mica Co., composite mica article and cementitious binder, (P.), B., 111. Chemical treatment of shellac, (P.), B., 111.
- Bougy, E., phosphorus in sugar beets, fodder beets, and their hybrids, B., 869.
- See also Colin, H.
- Bouhuys, A. G., and Amer. Enka Corp., treating natural and artificial fibres, (P.), B., 943.
- Bouillenne, M., and Bouillenne, R., soluble sugars in *Mercurialis perennis*, L. II., A., 1180.
- Bouillenne, R. See Bouillenne, M.
- Boulanger, C., metallic deposits on aluminium and its alloys, B., 232. Mechanism of protection [of aluminium and its alloys] by oxide films, B., 233.
- Boulanger, P. See Polonovski, M.
- Boulicaud, See Dalous, E.
- Boulind, H. F., velocities of positive ions in the corona discharge, A., 909.
- Boullé, A., X-ray study of anhydrous sodium metaphosphates, A., 571. Application of differential thermal analysis to anhydrous sodium metaphosphates, A., 591. Action of water on anhydrous sodium metaphosphates, A., 944.
- Boulton, J., and Reading, (Miss) B., classification of direct dyes with respect to production of level dyeings on viscose rayon, B., 302.
- Boundy, R. H. See Dow Chem. Co.
- Bourdeau, M., micro-determination of lactic acid in blood, A., 104. Determination of basal metabolism by interferometric gas analysis, A., 1528.
- Bourion, F., and Rouyer, E., determination of hydration of magnesium chloride ions, A., 1072.
- and Hun, (Mlle.) O., cryoscopic determination of total hydration of ions of sodium nitrate, A., 1459.
- Bourne, G., synthesis of vitamin-C by luteal tissue, A., 416. Distribution of vitamin-C in organs of the fox, A., 1176. Sterols, sex hormones, and cancer, A., 1400.
- and Allen, Russell, vitamin-C in lower organisms, A., 1176.
- Bourne, M. C., and Pyke, M. A., occurrence of cataract in rats fed on diets deficient in vitamin-B₂, A., 1175.
- Bousquet, E. W. See Du Pont de Nemours & Co., E. I., and Grasselli Chem. Co.
- Bousset, R., Grignard compound of pinene hydrochloride; action of ethylene oxide, A., 219. Influence of light on formation of benzoin, A., 622.
- Boutaric, A., temperature coefficient of surface tension of liquids, A., 283. Radioactivity of material derived from old roofs, A., 558. Method of comparing magnitudes of molecules and colloidal micelles, A., 1072.
- and Berthier, (Mlle.) P., adsorption of phenol and resorcinol from aqueous solution by carbon, A., 160.
- and Bouchard, J., action of normal or pathological liquids and therapeutic products on fluorescence of uranin solutions, A., 649. Action of the serum of mice with tar cancer on fluorescent power of solutions of uranine, A., 1526.
- and Coulon, P., absorption of dyes by suspensions of kaolin, A., 819.
- and Peyrot, depolarisation factor of light scattered by liquids, A., 1054.
- and Roy, (Mlle.) M., physico-chemical transformation of gum-arabic sols on heating, A., 31.
- See also Achard, C., and Piettre, M.
- Boutté, A., causes of non-weldability of nickel, B., 594.
- Bouyoucos, G. J., comparison between pipette and hydrometer methods for mechanical analysis of soil, B., 71. Determination of degree of decomposition which unknown decayed vegetable organic materials have already undergone in nature, B., 199. Ascertaining the existing structural stability of soil aggregates, B., 645. Improved hydrometer method for mechanical analysis of soils, B., 645. Comparison between the suction and centrifuge methods for determining the moisture equivalent of soils, B., 965.
- Bovalini, E., and Fabris, E., ternary system K_2SO_4 -(NH_4)₂ SO_4 -H₂O, A., 1461.
- Bovée, B. A. See Harris, E. I.
- Bovet, D., antiseptic properties of esters of rhodamine-G; rôle of surface tension and phenomena of photosensitisation, A., 257.
- and Simon, Alexander, prolongation of narcosis by piperidinomethylbenzodioxan and related derivatives, A., 245.
- Simon, Alexander, and Depierre, F., central analgesic and sedative action of aminomethylbenzodioxans, aminocoumarans, and phenoxyethylamines, A., 245.
- See also Baqç, Z. M.
- Bovill, E. W., Empire production of essential oils for perfumery, B., 124.
- Boving, J. O. See Lodge-Cottrell, Ltd.
- Bovingdon, H. H. S., improved laboratory apparatus for fumigation experiments, B., 127.
- Bowden, B. V. See Lewis, W. B.
- Bowden, E. See Entfield Cable Works.
- Bowden, F. P., and Bastow, S. H., range of action of surface forces, A., 819.
- and Kenyon, H. F., over-potential of hydrogen isotopes, A., 450.
- See also Bastow, S. H., and Beare, W. G.
- Bowen, B. D., Griffith, F. R., jun., and Sly, G. E., effect of a high-fat meal on respiratory quotient and heat production of normal and obese individuals, A., 241.
- Bowen, E. J., light filters for the mercury lamp, A., 320.
- Bowen, E. S. See Allee, W. C.
- Bowen, I. S., spectra of potassium, K iv and K v, and of calcium, Ca v and Ca vi, A., 1. Spectrum and composition of the gaseous nebulae, A., 424. Low terms in Mn v and Fe vi, A., 1045.
- Bowen, J. L., and Thomas, R., properties of solid soaps, B., 317.
- Bowen, N. L., and Schairer, J. F., system MgO-FeO-SiO₂, A., 447. Grünereite from Rockport, Massachusetts, and a series of synthetic fluor-amphiboles, A., 1478.
- Bower, E. L., treatment [for colouring] of rubber, (P.), B., 196.
- Bower, J., artificial filaments, ribbons, and similar materials, (P.), B., 541.
- Bower, J. C. See Martin, L. H.
- Bowers, C. S., and Hucker, G. J., composition of media for bacteriological analysis of milk, B., 874.
- Bowers, D. W., gas scrubbing, (P.), B., 982.
- Bowersox, J. W., and Burton-Dixie, Corp., cleaning [greasy] cotton sweepings, (P.), B., 846.
- Bowes, J. H., and Murray, M. M., chemical composition of teeth. I. Determination of fluorine: fluorine content of normal teeth, A., 234.
- Bowie, R. M., mercury cistern, A., 1218.
- See also Fox, G. W.
- Bowler, R. C., and Kanagy, J. R., deterioration of vegetable-tanned leather by oxalic acid, B., 242.
- and Wallace, E. L., effect of temperature on deterioration of leather containing sulphuric acid, B., 114.
- Wallace, E. L., and Kanagy, J. R., influence of magnesium sulphate on deterioration of vegetable-tanned leather by sulphuric acid, B., 420. Influence of magnesium sulphate on deterioration of vegetable-tanned leather by sulphuric acid, B., 777.
- Bowland, D. W. See Ziegler, F. K.
- Bowles, J. A. C. See Partridge, H. M.
- Bowles, R. F., storage of [printing] inks, B., 684.
- Bowmaker, E. J. C., influence of some batch constituents on colour of glass, B., 496.
- Bowman, P. I., Benedict, W. S., and Taylor, H. S., preparation and properties of benzene-d₆ [hexadeuterobenzene], A., 852.
- Bowman, R. G., separation of fine particles from gases, (P.), B., 210. Separation of fine particles from gases by contacting with a liquid, (P.), B., 755*.
- Bowman, S. B., Flint, F. C., and Hazel-Atlas Glass Co., glassware, (P.), B., 851.
- Bowman, W. H. See Ardagh, E. G. R.
- Bowser & Co., Inc., S. F. See Renfrew, P. B.
- Bowyer, W. W., Jacobs, G. H., and Peters Cartridge Co., external lubricant for ammunition, (P.), B., 47.
- Boxler, R., "Schlieren" test [for solvents], B., 296. Colouring caoutchouc in bulk, B., 563.
- Boy, C., determination of zinc in impure zinc ash, zinc oxide, and zinc residues, B., 551.
- Boyarski, M. See Belkin, S.

- Boyce, C. M., and Ditmars, J. R., treating surfaces of fibrous materials, (P.), B., 944.
- Boyce, J. C., spectra of argon in the extreme ultra-violet, A., 1291. Wave-length standards in the extreme ultra-violet, A., 1438.
- and Rieke, C. A., provisional wave-length standards for the extreme ultra-violet, A., 799.
- Boyee, O. D. See Lawson, G. B.
- Boyd, E. M., lipin composition of white blood-cells in women during pregnancy, lactation, and the puerperium, A., 517. Relation of lipin composition to physiological activity in ovaries of pregnant and pseudo-pregnant rabbits, A., 645. Rôle of placenta in fat metabolism of rabbit foetus, A., 778. Diurnal variations in plasma-lipins, A., 1000. Reaction of lipins in blood-leucocytes to fever and infection, A., 1009.
- and Wilson, K. M., exchange of lipins in the umbilical circulation at birth, A., 890.
- Boyd, T. A. See Campbell, J. M., and Lovell, W. G.
- Boyd, W. C., and Mover, P., azoproteins, A., 1140.
- See also Hooker, S. B.
- Boyd, W. J., and Robson, W., synthesis of indole-3-aldehyde and its homologues, A., 628. Synthesis of amino-acids. I. Piperidine and diethylamine as catalysts in condensation of aromatic aldehydes with hydantoins. II. Sulphides as reducing and hydrolytic agents in hydantoin synthesis of amino-acids. III. Tryptophan, A., 628, 1379.
- Boyd-Barrett, H. S. See Wieland, H.
- Boye, E., technical recovery of solvent vapours, B., 91. Chemical fire extinguishers, B., 433. Chemical principles and practice of fire prevention, B., 705. Utilisation of peat, B., 706. Practical applications of colloids. I. Colloids in medicine, B., 1163.
- Boyer, A. J. See Frazier, W. C.
- Boyer, J. L., steam-distilled products as related to protective coatings, B., 68.
- Boyes, J. R. See Ferguson Battery Co.
- Boykin, J. T. See Garrey, W. E.
- Boyland, E., and Boyland, M. E., tissue metabolism. VI. Lactic dehydrogenase, xanthine-oxidase, and nucleosidase in tumour and muscle extracts. VII. Action of tumour extracts on hexose diphosphate, A., 782, 1148.
- Boyland, M. E. See Boyland, E.
- Boynton, A. J. See Bradley, W.
- Boys, C. V. See Board of Trade.
- Bozel-Malétra Société Industrielle de Produits Chimiques, simultaneous production of salts of sexavalent chromium and other oxygen compounds, (P.), B., 147.
- Bozorth, R. M., Dillinger, J. F., and Kelsall, G. A., magnetic material of high permeability attained by heat-treatment in a magnetic field, B., 1001.
- Brabender, C. W., six years farinography, B., 171.
- Brabender, G. J. See Abrams, A.
- Bracaloni, L., determination of quinine iodobismuthate, B., 828.
- See also Vita, G.
- Braccio, L. A., ultra-filtration and its application to extraction of active principles of plants, B., 477.
- Bracco, J. See Roche, (Mme.) A.
- Bracewell, S., recovery of bromoform [in heavy-mineral separation], B., 501.
- Bracey, R. J. See Milford, M.
- Brachet, J., metabolism of the frog's egg in course of development. II. Respiration of the egg during fertilisation and mitosis. III. Respiratory metabolism and "organising centre" of the gastrula, A., 1271.
- and Needham, J., activity of arginase during development of the hen embryo, A., 659.
- Brachvogel, R. See Feist, K.
- Bracken, A. F., effect of smut treatments on yield of winter wheat, B., 167.
- Brackenbury, J. M., and Upson, F. W., types of lactones formed from monobasic sugar acids under varying conditions, A., 196.
- Bradbury, N. E., formation of negative ions in gases by electron attachment. I. NH_3 , CO , NO , HCl , and Cl_2 , A., 140. Electronic configuration of molecules and their electron affinity, A., 150.
- and Tatel, H. E., formation of negative ions in gases by electron attachment. II. CO_2 , N_2O , SO_2 , H_2S , and H_2O , A., 140.
- See also Bloch, F., and Young, L. A.
- Braddick, H. J. J., hydrogen discharge tube for spectrographic work, A., 320.
- and Ditchburn, R. W., absorption of light in caesium vapour in the presence of helium, A., 907.
- See also Ditchburn, R. W.
- Bradfield, A. E., thermo-regulator for heating and cooling baths, A., 319. Fractional distillation under reduced pressure, A., 321.
- Jones, E. R., and Simonsen, J. L., syntheses in sesquiterpene series. I. II. Condensation of ethyl oxalate and tetrahydrocarvone, A., 88, 755.
- Penfold, A. R., and Simonsen, J. L., α - and β -santalols, A., 755.
- Bradfield, R. See Peech, M.
- Bradford, B. W., catalytic effect of hydrogen on the carbon monoxide flame, A., 710.
- Bradley, A. See Whympier, R.
- Bradley, A. J., absorption factor for the powder and rotating-crystal methods of X-ray crystal analysis, A., 1306.
- Bradley, C. A., jun., and McKellar, A., absorption of acetylene and didcuter-acetylene in the photographic infra-red, A., 1053.
- Bradley, C. D., and Snoddy, L. B., ion distribution during initial stages of spark discharge in non-uniform fields, A., 676.
- Bradley, H., [rubber] latex in the boot and shoe industries, B., 961.
- Bradley, H. C., and Hodges, M., effect of mucin and mucinoids on peptic digestion, A., 1025.
- Bradley, L., McKee, E. P., and Bradley-McKee, Corp., production of pulp and treatment of residual liquors, etc., (P.), B., 1089.
- Bradley, R. S., rate of reactions in solution, A., 173.
- See also Heilman, R. H.
- Bradley, T. F., and Amer. Cyanamid Co., long-chain esters and compositions thereof, (P.), B., 92. Resinous composition and its application, (P.), B., 112.
- and Ellis-Foster Co., [alkyd] resinous complexes, (P.), B., 112. Resinous product and its manufacture, (P.), B., 278.
- Bradley, W., Boynton, A. J., and Bradley-Fitch Co., gaseous reduction of metal [manganese] oxides, (P.), B., 452.
- and Bradley-Fitch Co., winning manganese values [from oxide ores], (P.), B., 274. Recovering manganese values, (P.), B., 452.
- Bradley-Fitch Co. See Bradley, W.
- Bradley-McKee Corporation. See Bradley, L.
- Bradshaw, H. See Du Pont de Nemours & Co., E. I.
- Bradshaw, P. J. See Blatherwick, N. R.
- Bradshaw, W. N. See Hothersall, A. W.
- Bradt, W. E., organic compounds of selenium. I. and VI., A., 1139, 1357.
- See also Green, C., and Kirk, R. C.
- Bradway, E. M., and Mattill, H. A., association of fat-soluble vitamins and antioxidants in plant tissues, A., 130.
- Brady, F. L., prevention of corrosion of lead in buildings, B., 807.
- Brady, J. J., energy distribution of photoelectrons as a function of the thickness of a potassium film, A., 4.
- Brady, O. L., and Lahiri, J. K., nitration of alkylbenzenes. III. Orientation of dinitro-*p*-tert.-butyltoluene, A., 204.
- Brækken, H., and Scholten, W., crystal structure of mercuric chloride, A., 285.
- Bräucker, E. See Jenckel, E.
- Bragagnolo, G., mineral waters of Venice; bromo-lithia water of Scorzè, A., 60. Water from Asolo (Treviso), A., 468. Thermal water from Val Calona (Padua), A., 468.
- and Longo, B., Rainerian water, A., 468.
- Bragg, J. H., increasing vitamin content of liquid foods, (P.), B., 204.
- Bragg, W. L., new crystallography, A., 1059.
- Braid, A. F., high-speed [tungsten] steel, (P.), B., 595.
- Braida, A. See Stüber, C.
- Braidech, M. M., and Emery, F. H., spectrographic determination of minor chemical constituents in various water supplies in the United States, B., 608.
- Braier, B., protein metabolism of the armadillo, *Chaetophractus villosus*, Desmarest, A., 1529.
- and Morea, R., endogenous nitrogen metabolism of hypophysectomised rats, A., 1015.
- Brain, C. K., weeds and poisonous plants of Southern Rhodesia, A., 1436.
- Braker, W., and Christiansen, W. G., local anaesthetics; phenylprocaine, A., 1155. Sulphide analogues of azo-dyes having bactericidal properties, A., 1360.
- See also Christiansen, W. G., and Jones, W. S.
- Braman, W. W., Black, A., Kahlenberg, O. J., Voris, Le R., Swift, R. W., and Forbes, E. B., utilisation of energy-producing nutriment and protein in white and yellow corn and in diets deficient in vitamin-A, -D, and -B₂, A., 902; B., 697.
- Brambel, C. See Cowles, R. P.
- Bramer, H. von. See Kodak, Ltd.
- Bramkamp, R. G., protein content of subcutaneous oedema fluid in heart disease, A., 887.
- Bramley, A., continuous β -ray spectrum, A., 6. Band spectra measurements of mass, A., 144.
- and Cooper, A. T., diffusion of non-metallic elements in iron and steel. III. Diffusion of phosphorus in iron and steel, A., 692.

- Bramley, A., and Haywood, F. W., diffusion of non-metallic elements in iron and steel. I. Diffusion of sulphur in iron and steel. II. Diffusion of oxygen in iron, A., 692.
- and Watts, J. T., diffusion of non-metallic elements in iron and steel. IV. Nitriding of iron and steel, A., 692.
- Branch, C. F. See Morton, A. A.
- Branch, G. E. K., and Yabroff, D. L., anomalous strength of salicylic acid, A., 165.
- See also Joslyn, M. A.
- Branchen, L. E. See Carbide & Carbon Chem. Corp.
- Brand, E., and Cahill, G. F., cystinuria. III. Metabolism of serine, A., 886.
- Cahill, G. F., and Block, R. J., cystinuria. IV. Metabolism of homocysteine and homocystine, A., 1153.
- Cahill, G. F., and Harris, M. M., cystinuria. II. Metabolism of cystine, cysteine, methionine, and glutathione, A., 775.
- Brand, J., condensed gases obtained from petroleum in Germany and their application in the gas industry, B., 132.
- Brand, K., and Bausch, W., influence of alkyl- and alkylene-thiol groups on therapeutic action of organic compounds. III. Allylthiol compounds, A., 485.
- and Lohmann, A., red dye of the *Alkanna* root, A., 1244.
- and Mahr, J., reduction of nitro- and polynitro-compounds. XIV. Aromatic compounds, A., 482.
- Brandaleone, H., and Ralli, E. P., fasting blood-carotene level in normal and diabetic individuals, A., 382.
- Brandegge, M. M., and Combustion Utilities Corp., carbonisation of solid fuel, (P.), B., 179.
- Branden, F. van den. See Pottier, R.
- Brandenberger, J. E., and Du Pont Cellophane Co., Inc., sheets or films of regenerated cellulose, (P.), B., 1138.
- Brandenburg, E., importance of copper for development of plants in comparison with boron and manganese: copper-deficiency phenomena, A., 553.
- Brandenburg, H. R., opacity factor in specific surface determinations [on cements], B., 497.
- Brander, E., calculation of physical properties of the rare gases from the Clausius virial, A., 691.
- Brandes, R. See Kohorn & Co., O.
- Brandon, G. E. See Barrett Co.
- Brandonschiller, M., action of bromoacetic acid on sexual functions of the rat, A., 656.
- Brandrup, W., extraction of *Drosera rotundifolia*, B., 749.
- Brandstrup, E., residual reducing substances of blood in puerperium, A., 109.
- Brandt, A. F. See Füchtbauer, C.
- Brandt, C. W. See Hosking, J. R.
- Brandt, D. G. See Doherty Research Co.
- Brandt, E., geometric-optical and wave-theoretical methods of calculating intensities of diffraction of molecular rays by rigid crystal surfaces, A., 140.
- See also Kindler, K.
- Brandt, K., Euler, H. von, Hellström, H., and Löfgren, N., gramine and two concomitants in leaves of varieties of barley, A., 1434.
- See also Euler, H. von.
- Brandt, O., and Freund, H., high-frequency sound waves in Kundt's tube, A., 155.
- Aggregation of aerosols by sound waves, A., 699.
- Tracing of standing sound and ultra-sonic waves in gases, A., 1062.
- Brandt, P. M. See Jones, J. R.
- Brandus, E. See Claus, W.
- Brandwood, J., textile yarns and threads having incorporated therein rubber latex or analogous dispersions, (P.), B., 1140.
- Branion, H. D. See Hamlyn, W. L., and Taylor, N. B.
- Braniski, A., so-called refractory cements and the first method of preparing really refractory monolithic structures, B., 726.
- Brann, L., fluosilicates [silicofluorides], (P.), B., 147.
- Brannon, L. W. See Howard, W. F.
- Brard, D., toxicology of chromium derivatives, A., 399.
- Toxicity of chromium compounds, A., 399.
- Determination of chromium. I. Volumetric and colorimetric micro-determination of hexavalent chromium. II. Oxidation of trivalent chromium to hexavalent chromium, A., 1095, 1339.
- Bras, G. J. See Scherlin, S. M.
- Brasch, A., Lange, Fritz, Waly, A., Banks, T. E., Chalmers, T. A., Szilard, L., and Hopwood, F. L., liberation of neutrons from beryllium by hard X-rays; production of radioactive elements, A., 142.
- Brasher, (Miss) D. M., and Parton, H. N., thermodynamic study of systems of the type $PbCl_2-RCl-H_2O$ at 25°. III, A., 582.
- Brassert, H. A., and Brassert & Co., H. A., reduction and smelting of [iron] ores, (P.), B., 234.
- Apparatus for producing low-carbon metals, (P.), B., 234.
- Molten steel, (P.), B., 313.
- Metals, (P.), B., 313.
- Apparatus [open-hearth furnace] for production of steel, (P.), B., 595.
- Mixed gases and combustion thereof, (P.), B., 792.
- Coking of solid and liquid carbonaceous fuels, (P.), B., 1125.
- Apparatus for heat treatment of hydrocarbons and hydrocarbon mixtures, (P.), B., 1126.
- Zimmermann, P., and Brassert & Co., H. A., vertical shaft furnace, (P.), B., 313.
- Brassert & Co., H. A., electrical precipitation of suspended materials from gases, (P.), B., 30.
- and Calverley, J. E., purification of air or gases, (P.), B., 210.
- See also Brassert, H. A.
- Brassert-Tidewater Development Corporation, coking of hydrocarbons, (P.), B., 259, 393.
- Brasseur, H., crystal structure of ergotamine, A., 1451.
- and Piérard, J., "banded spectrum" method for measurement of dispersion of birefringence of a crystal plate, A., 19.
- Brasseur, P., anhydrous ferric orthophosphate, A., 1090.
- See also Billy, M.
- Bratke, R. O., process for emulsifying oils, fats, waxes, resins, pitches, asphalts, etc., with water, (P.), B., 860.
- Brattain, R. R. See Barnes, R. B.
- Bratu, E. See Abel, E.
- Bratzler, K. See Sachsse, H.
- Braude, S. J., motion of electrons in electric and magnetic fields taking into consideration the action of the space charge, A., 1294.
- See also Slutskii, A. A.
- Brauer, G., and Victor, E., equilibrium and kinetics of bromine chloride ($BrCl$), A., 1206.
- See also Zintl, E.
- Brauman, P., isoamyloxyvanadyl salicylates, A., 1122.
- Braun, C. E., and Rees, F. M., insulin-like materials from plant tissues, A., 549.
- Braun, D. A., freezing of iron ores and methods for its prevention, B., 498.
- Braun, E. See Freudenberg, K.
- Braun, G., Sartain, P. J., Fassnacht, R. C., and Schwoerer, R. C., industrial liquid [refrigerant], (P.), B., 434.
- Braun, H., determination of blood-sugar; bound sugar of blood, A., 373.
- Braun, I. von, naphthenic acids, B., 618.
- Braun, T., fore-lifting of sugar beets under Schleswig conditions, B., 647.
- Braun, W., detection of dilution of bilberry wine, B., 824.
- Braun, Willi. See Schöpf, C.
- Braunbek, W., gas discharges with an electrolyte as cathode, A., 1184.
- Collisions of very fast heavy particles, A., 1442.
- Brauner, L., suction tension and permeability to water of living and dead [plant] tissues, A., 671.
- Braunholtz, W. T. K., British fuels, B., 483.
- See also Pease & Partners.
- Brauns, F., and Hibbert, H., lignin and related compounds. XII. Methanol-lignin. XV. Phenol-lignin. XVII. Methylation of Willstätter and Freudenberg lignins, A., 1373.
- See also Buckland, I. K., Gray, K. R., King, E. G., and Marshall, H. B.
- Braunstein, A. E., specificity of enzyme catalysis, A., 940.
- and Severin, B. A., mechanism of aerobic resynthesis of adenylypyrophosphoric acid in bird erythrocytes, A., 640.
- Bravo, F. See Wulff, L. M. R.
- Bravo, G. A., rapid method for determination of reducing sugars, A., 734.
- Antimony electrode for measuring p_H , A., 1336.
- Modern chemical and chemico-physical theories applied to the leather industry, B., 469.
- Tizera (*Rhus pentaphylla*) wood from Sicily, B., 819.
- Brawley, D. J. See Crockford, H. D.
- Bray, U. B., Pollock, R. C., Merrill, D. R., and Union Oil Co. of California, catalytic treatment of petroleum, (P.), B., 983.
- Swift, C. E., and Union Oil Co. of California, lubricating oil, (P.), B., 1035.
- and Union Oil Co. of California, treating oil [for separation of asphalt], (P.), B., 181.
- Fractionation of mineral oil, (P.), B., 1035.
- Bray, W. C., and Liebafsky, H. A., kinetic salt effect in the fourth-order reaction $BrO_3^- + Br^- + 2H^+ \rightarrow$; ionisation quotients for HSO_4^- at 25°. A., 308.
- Brayshaw, S. N. See Brayshaw Furnaces & Tools, Ltd.
- Brayshaw Furnaces & Tools, Ltd., Brayshaw, S. N., and Newman, F. C., ovens or furnaces for tempering or heat-treating articles, (P.), B., 1025.
- Breakay, E. P., and Miller, A. C., comparing the oxidizing properties of contact insecticides, B., 969.
- Halowax as an oxidizer, B., 969.
- Breaux, R. P. See Dean, H. T.
- Breazeale, D. F. See Bird, E. W.
- Breazeale, J. F. See McGeorge, W. T.

- Breazeale, W. M., electro-optical Kerr effect in ammonia, nitrogen, and oxygen, A., 1192.
- Brech, F., pyrites in quartz, A., 842.
- Bréchet, P. See Schoen.
- Brecht-Bergen, N. See Schleicher, A.
- Breckpot, R., photometric stage for study of emission spectra, A., 188. Spectrographic determination of traces of germanium; application to copper and metallic iron, A., 1095. Spectrographic determination of traces of bismuth, arsenic, antimony, tin, and lead in electrolytic copper, A., 1096.
- and Lialine, L., illumination of the spectrograph in quantitative spectral analysis, A., 722.
- and Mevis, A., persistence of some lines due to impurities in iron, A., 136. Quantitative spectral analysis. III., A., 719.
- Bredden, E., diaculation. II. Apparatus and operative technique. III. Formulae for preparation of infusions, B., 782.
- Bredden, H., preparation of depurated sulphur, B., 748. [Tubular] apparatus for extracting drugs, etc., (P.), B., 254.
- Bredée, H. L. See Cohen, E. and Hermans, P. H.
- Bredereck, H., carbohydrates and furfuraldehyde. I., A., 847.
- Bredig, M. A. See Franck, H. H.
- Bredt, O., where does the gas in roasted coffee come from? B., 251.
- Breeman, L., jun., and Scholes, S. R., [determining] alkalis in silicates, B., 405.
- Breerwood, C. H. See Fuller Co., and Miller, B. L.
- Bregger, N., [iron or steel] metal-working, (P.), B., 314.
- Brehmer, T. E., determination of minimal quantities of organic matter in mixtures of gases, A., 876.
- Breinl, F., and Haurowitz, F., specificity changes in immune sera after chemical pre-treatment, A., 126.
- Breit, G., isotope shift of thallium, A., 138.
- and Wheeler, J. A., collision of two light quanta, A., 143.
- and Yost, F. L., radiative capture of protons by carbon, A., 1186.
- See also Wheeler, J. A.
- Breitner, S. See Fischer, Hans.
- Breitschädel, F., production of lamb-skin-like texture, (P.), B., 945.
- Breitweiser, A. See Smith, H. W.
- Breitwieser, K. See Strohecker, R.
- Bremer, E. W., and Electroloy Co., resistance-welding electrode, (P.), B., 108.
- Bremer, O., Graebe-Ullmann carbazole synthesis and its application to N-substituted pyridinotriazoles, A., 226. 3:4-Pyridino-7:8:9-triazoles, A., 993.
- Brémond, E. See Fabre, H.
- Brémond, P., permeability of ceramic bodies to gases at high temperature, B., 630.
- Bren, B. C., and Du Pont Viscoloid Co., [resinous] composition, (P.), B., 368.
- Brenchley, W. E., influence of season and of application of lime on botanical composition of grassland herbage, B., 821.
- Brendlen, J. H., present status of chemicals in sewage treatment, B., 80.
- Brendlin, J. H. See Rudolfs, W.
- Brennan, J. B., electrolytic devices [condensers], (P.), B., 1100.
- Brennecke, E. See Diepschlag, E.
- Brenner, A. See Strausser, P. W. C.
- Brenner, P., effect of heat treatment on resistance of plated duralumin to corrosion, B., 955.
- Brenner, S., black spots on tin and tinned ware, B., 856.
- Brenschede, W., and Schumacher, H. J., bromine oxide Br₂O, A., 1334.
- See also Bodenstein, M.
- Brentano, J. C. M., intensity of X-ray reflexions from crystalline powders, A., 1306.
- Breon & Co., G. A. See Becker, M. M.
- Breskin, C. A., synthetic plastics [in the building industry], B., 1103.
- Bresler, S. E., and Talmud, D. J., depth effect of orienting forces and stability of foams and emulsions, A., 701.
- Bresser, A., determination of diphenyl-amino and substituted ureas in propellant powders, B., 334.
- Bressler, S., effect of addition of salts on swelling in willow tanner's liquor, B., 469.
- Bretsznajder, S., kinetics of decomposition of single crystals of calcite, A., 308.
- See also Zawadzki, J.
- Breusch, F., and Scalabrino, R., relationships of liver-lipins, A., 1004.
- Brevolite Lacquer Co., preparation of pigmented cellulose ester compositions and solutions, (P.), B., 367.
- Brewbaker, H. E., and Deming, G. W., effect of variations in stand on yield and quality of sugar beet grown under irrigation, B., 646.
- Brewer, A. K., and Kueck, P. D., chemical action in the glow discharge. XIII. Chain reactions in oxidation of hydrogen in the positive column. XIV. Ignition of hydrogen-oxygen mixtures, A., 45, 176. Relative abundance of isotopes of lithium, potassium, and rubidium, A., 140.
- Brewer, P. H., Kraybill, H. R., and Purdue Res. Foundation, negatively-charged aluminium gel, (P.), B., 100.
- Brewer, R. E., and Ryerson, L. H., high-hydrogen water-gas from younger coal cokes, B., 979.
- Brewer, S. R., and Hinsley, J. F., electrolytic descaling, cleaning, or plating of metals, (P.), B., 1100.
- Brewington, G. P., secondary structure of X-ray absorption edges from elements in certain cubic crystals, A., 139.
- Brewster, N. H. See Teague, M. C.
- Brewster, O. C., and Gasoline Products Co., combined [mineral oil] stabilisation and absorption process, (P.), B., 794.
- Breyer, F. G., Koller, J. P., and Krebs Pigment & Color Corp., [lithopone] pigment, (P.), B., 320.
- and Singmaster & Breyer, Inc., fine dry grinding, (P.), B., 1026.
- Breyhan, T. See Auwers, K. von.
- Brezina, E. [with Schmidt, Wilhelm], construction and use of filtration apparatus [for removal of poisonous gases and dust from the atmosphere], B., 430.
- Brezinski, L. P. See Standard Oil Development Co.
- Brian, J. C. See Simon, Ltd., H.
- Briau, A. See Terlet, H.
- Brick, R. M. See Phillips, A.
- Brickenkamp, R. W. See Chamot, E. M.
- Brickwedde, F. G., applications of deuterium, A., 713.
- Scott, R. B., Urey, H. C., and Wahl, M. H., vapour pressure of deuterium, A., 1454.
- See also Silsbee, F. B.
- Brickwedde, L. H. See Vinal, G. W.
- Bricout, P., calculation of perturbation of a hydrogenoid atom by a free electron, A., 144.
- Bridel, M., and Charaux, C., composition of Bourdaine bark. III. Isolation of frangularoside and its hydrolysis product frangularol. IV. Water-soluble complex purgative hydrolysed by rhamnodiastase, A., 1041.
- Bridge, A. F., cathodic protection of pipelines, B., 459.
- Bridge, J. F. See Hatfield, W. H.
- Bridger, G. L. See Scott, A. F.
- Bridgman, P. W., melting parameters of nitrogen and argon under pressure, and nature of the melting curve, A., 156. Electrical resistance and volume changes [with pressures] up to 20,000 kg. per sq. cm., A., 567. Effect of slight impurities on elastic constants, particularly compressibility of zinc, A., 572. Pressure-volume-temperature relations of the liquid, and the phase diagram of heavy water, A., 1454.
- and Dow, R. B., compressibility of solutions of amino-acids, A., 295.
- See also Du Pont de Nemours & Co., E. I.
- Briegleb, G., and Kambeitz, J., dipole moment of *s*-trinitrobenzene, A., 13. Optical method for determination of heats of dissociation of organic molecular compounds of the type AB₂, A., 169.
- and Lauppe, W., investigation of molecular compounds by Raman spectra. I. Saturation of affinity of oxygen in molecular compounds of alcohols, ethers, ketones, and aldehydes, A., 429.
- Briers, F., magnesium and potassium chlorates, A., 714.
- Briggs, A. P. See Bronn, G. O.
- Briggs, C. W., and Gezelius, R. A., surface-cracking of steel castings during pickling, B., 411.
- Briggs, D. R., physico-chemical studies on gum-arabic solutions, A., 31. Physico-chemical studies on gum-arabic solutions. III. Osmotic pressures of arabic acid and sodium arabate, A., 294. Application of an empirical correction to the Donnan effect in the determination of mol. wts. of proteins by osmotic pressure measurements, A., 1458.
- Briggs, H., alteration of coal seams in the vicinity of igneous intrusions, and associated problems, B., 931.
- Briggs, L. H., hinokinin as the enantiomorph of cubebinolide, A., 1128.
- Bright, N. F. H., and Garner, W. E., nucleus formation on crystals of copper sulphate pentahydrate, A., 151.
- Brighton, T. B. See Oldright, G. L.
- Brigl, P., and Grüner, H., mannitol. IV. Acetone- [isopropylidene-] mannitols and mixed esters of mannitol, A., 194.
- and Zerrweck, W., vacciniin and other monobenzoylglucoses, A., 199.
- Brikman, N. M. See Palkin, A. P.
- Brill, B., printing chrome mordant dyes on real and artificial silks, B., 449.
- Brill, E., dental filling materials [cements], (P.), B., 951.
- Brill, R., determination of particle size by X-ray and electron analysis, A., 162. Constitution of lithium nitride, A., 812.

- Brilliantov, N. A.**, and **Obreimov, I. V.**, plastic deformation of rock salt. III, A., 1311.
- Brillouin, M.**, Planck quanta and the atomic field of force, A., 144. Heterogeneous electromagnetic ether capable of producing a quantic atomic field of force, A., 279.
- Brinck, J.** See **Katsch, G.**
- Brinckert, N.**, comparison of crude petroleum oils from North Germany, B., 885.
- Brindle, H.**, assay of phenazone, B., 252.
- and **Burlinson, H.**, preparation, viscosity, and suspending power of tragacanth mucilage, B., 253.
- Brindley, G. W.**, diamagnetic susceptibilities and polarisabilities of ions, A., 14.
- and **Hoare, F. E.**, magnetic measurement of ionic deformations in crystals, A., 569.
- and **Spiers, F. W.**, intensities of X-ray reflexions from powders, A., 16. Effect of dispersion and of lattice distortion on atomic scattering factor of copper for X-rays, A., 150. X-Ray investigation of lattice distortions produced in copper by filing, A., 433. Lattice distortion in a copper-beryllium alloy, A., 816.
- Briner, E.**, reactivity and constitution of nitric and sulphuric acids. I. General, A., 564.
- and **Bolle, P.**, reactivity and constitution of nitric and sulphuric acids. II. Reactivity of nitric acid in aqueous and acetic acid media, A., 564.
- and **Carceller, J.**, ozone as an oxidising catalyst. VIII. Ozonation of propane and butane, A., 1103. Catalytic effect of ozone in the oxidation of hydrocarbons, A., 1466.
- Chodat, F.**, and **Paillard, H.**, presence of ozone in air and its effect on growth of plants, A., 1548.
- Fried, S.**, and **Susz, B.**, Raman spectra of solutions of pyrogallol, gallic acid, and tannin, A., 1446.
- and **Gelbert, A.**, ozone as oxidising catalyst. IX. Ozonisation of anisaldehyde, vanillin, and piperonal, A., 1328.
- Hoekstra, J. W.**, and **Susz, B.**, reactivity and constitution of nitric and sulphuric acids. V. Sulphonating action of sulphuric acid in aqueous and acetic solutions. VI. Viscosity, electrical conductivity, and Raman spectrum of mixtures of sulphuric and acetic acids, A., 710.
- and **Paillard, H.**, analysis of very dilute ozone, A., 462.
- Rokakis, E.**, and **Susz, B.**, peroxidation of nitrogen oxides in presence of ozone, A., 460.
- Susz, B.**, and **Favarger, P.**, reactivity and constitution of nitric and sulphuric acids. III. Raman spectra, viscosities, and melting points of mixtures of nitric and acetic acids, A., 564.
- Susz, B.**, and **Perrotet, E.**, chemical reactivity and Raman spectra in the eugenol and vanillin group, A., 807.
- See also **Susz, B.**
- Brieg, G. G.** [with **Anastasi, S.**], grinding of iron ore in single- and multi-compartment mills, B., 676.
- Brink, R. A.**, anthocyanin plant colours and yield in maize, A., 267.
- Brinkman, H.** See **Horst, D. T. J. ter.**
- Brinzer, G. A.** See **Cutler, G. H.**
- Brützinger, H.**, thawing of frozen water-pipes, B., 385.
- and **Baier, H. G.**, investigation of different types and isomerides of non-dissociated organic compounds with the help of the dialysis method, A., 1479.
- and **Eckhardt, W.**, oxalato-compounds, A., 1335.
- and **Osswald, H.**, complex sulphates, A., 181. Cellophane and cuprophane as membranes for dialysis and electro-dialysis, A., 467. Complex cobalt ions in the dissolved state, A., 582. Complex compounds of which the central ion is a complex cation. I. Complex sulphato- and oxalato-anions with complex cobalt cations as central ions. II. Complex sulphato- and oxalato-compounds with complex cobalt cations as central ions, A., 1091, 1471. Cupric ammonium compounds and cupric acid ammonium compounds, A., 1212. Complex amines of trivalent metals, A., 1471.
- and **Ratanarat, C.**, structure and composition of metal ions in aqueous solution; aquo-complexes and hydration of metal ions, A., 579. Ions of some oxygen acids in the dissolved state, A., 582. Composition and hydration of dissolved complex metal-thiocyanate ions, A., 824. Molybdate and tungstate ions in solutions of varying p_{H} , A., 1322.
- Ratanarat, C.**, and **Osswald, H.**, hydration of ions as a function of their electrostatic potential, A., 824.
- and **Schall, A.**, influence of salt or acid hydrophilic colloids on the solubility of sparingly soluble acids and bases. II. Gelatin, A., 929. Solubility of sparingly soluble substances in colloid solutions, A., 929.
- and **Schlegel, H.**, purification of effluent waters by hydrogels, B., 480.
- and **Wallach, J.**, polyvanadates existing in alkaline solution, A., 1322.
- Briot, A.**, and **Vodar, B.**, ultra-violet absorption spectrum of gaseous, liquid, and dissolved ammonia, A., 1298.
- Briscoe, H. T.** See **Welcher, F. J.**
- Briscoe, H. V. A.** See **Emeléus, H. J.**, and **Matthews, (Miss) J. W.**
- Briscoe, W. D.**, and **B.M.P. Co., Inc.**, separation of metals from ores, (P.), B., 908.
- Briskas, S. B.** See **Delétang, R.**, and **Lesné, E.**
- Briske, P.** See under **Briske & Prohl.**
- Briske & Prohl**, and **Luschenowsky, A.**, [magnesium-aluminium alloys, (P.)], B., 1099.
- Brisou, J.**, technique for examination of butter for typhoid and paratyphoid bacteria, A., 663. Vitality of the typhoid bacillus in butter as a function of the acidity, A., 1168.
- Brissaud, M.**, determination of carbon by the wet method and application to determination of organic material in nitrating baths, A., 638. Properties of cellulose nitrates as a function of the composition of the nitrating baths, B., 666. Methylene-blue index of cellulose, B., 798. Comparison of chemical methods for determining the degradation of cotton linters, B., 1038.
- Bristow, W. A.**, coalite low-temperature carbonisation process, B., 932. Chemical engineering aspect of low-temperature carbonisation, B., 978.
- and **Pope, P. C.**, reduction of solid substances to a finely-divided state, (P.), B., 289.
- See also **Low Temperature Carbonisation, Ltd.**
- British Aluminium Co., Ltd.**, **Coates, A. C.**, and **Brook, G. B.**, aluminium fluoride, (P.), B., 495.
- Sims, W. E.**, **Derbyshire, S. F.**, and **Bloore, E. J.**, aluminium fluoride, (P.), B., 629. Aluminium fluoride and double fluorides of aluminium and ammonium, (P.), B., 629.
- Brit. Bemberg, Ltd.**, cuprammonium artificial silk, (P.), B., 144, 351. [Apparatus for] after-treating [washing] artificial silk, (P.), B., 541. After-treatment and drying of freshly spun and washed cellulose hydrate artificial silk in wound form, (P.), B., 1041.
- Brit. Cast Iron Research Association**, **Norbury, A. L.**, and **Morgan, E.**, cast iron, (P.), B., 555.
- Brit. Celanese, Ltd.**, reduction of permeability [to water] of articles and materials, (P.), B., 18. Synthetic resins [from phenol] and compositions containing same, (P.), B., 34. Separation of solids from solution by evaporation, (P.), B., 130. Cellulose ester or ether moulding powders, (P.), B., 162. Plastication of cellulose esters or ethers, (P.), B., 194. Preparation and treatment of textile materials, (P.), B., 300. Treatment of [cellulose ester and ether] textile materials [for reducing electrostatic difficulties in processing], (P.), B., 304. Cellulose derivative plastic compositions, (P.), B., 320. Artificial filaments, films, etc., [of subdued lustre], (P.), B., 448. Artificial filaments, yarns, horse-hair, films, and similar products, (P.), B., 588. Organic ethers, (P.), B., 619. Compositions and other products comprising cellulose derivatives, (P.), B., 624. Artificial textile materials, (P.), B., 624. Treatment [dyeing] of artificial filaments, threads, ribbons, and similar materials, (P.), B., 626. Cellulose derivatives, (P.), B., 667. Cellulose esters, (P.), B., 720. Thermoplastic compositions and articles comprising them, (P.), B., 737. Manufacture or treatment of yarns, threads, fabrics, and other textile materials, and films, foils, etc., (P.), B., 765. Manufacture or treatment of filaments, threads, ribbons, and other textile materials, (P.), B., 799. Dressings for textile materials, (P.), B., 898. Treatment of yarns, filamentary bundles, and similar textile materials, (P.), B., 943. Artificial filaments, yarns, films, etc., (P.), B., 944. Artificial straws, etc., (P.), B., 987. Artificial staple fibres, (P.), B., 1040. Cellulose ester and ether compositions, (P.), B., 1137.
- Dickie, W. A.**, and **Sowter, P. F. C.**, production and treatment of artificial filaments, yarns, films, and similar materials containing cellulose derivatives, (P.), B., 266.

- Brit. Celanese, Ltd., Dickie, W. A., and Tyce, G. C., [spun] yarns or threads, (P.), B., 18.
- Dreyfus, H., Moncrieff, R. W., and Hill, F. B., saponification of cellulose ester filaments, threads, fabrics, films, etc., (P.), B., 1138.
- and Ellis, G. H., coloration of textile materials [acetate silk], (P.), B., 989.
- Ellis, G. H., and Brown, F., production and use of dyes [of anthraquinone series for acetate silk], (P.), B., 141.
- Ellis, G. H., Moncrieff, R. W., and Hill, F. B., artificial threads, filaments, fibres, ribbons, and similar products, (P.), B., 668.
- Finlayson, D., and Happey, F., crimped filaments, yarns, or fibres, (P.), B., 447.
- Groombridge, W. H., and Mellers, E. V., cellulose from lignocellulosic material, (P.), B., 986, 1137.
- Groombridge, W. H., and Peek, R. J., alcohols and ethers, (P.), B., 664.
- Kirk, E. W., and Ellis, G. H., coloration of textile materials [dyeing of cellulose acetate with ice colours], (P.), B., 185.
- Mellor, A., and Mann, R. J., fabric treatment [coating or filling apparatus], (P.), B., 848. Treatment of artificial filaments, threads, yarns, fabrics, etc., (P.), B., 1040.
- Moncrieff, R. W., and Hill, F. B., artificial filaments, threads, yarns, and similar materials, (P.), B., 720. Treatment or manufacture of cellulose ester filaments, threads, yarns, ribbons, and similar materials, (P.), B., 765. Manufacture and [stretching] treatment of artificial spun yarns, (P.), B., 946.
- Moncrieff, R. W., Hill, F. B., and Frearson, T. B., saponification of organic esters of cellulose, particularly in the form of filaments, threads, fibres, yarns, ribbons, etc., (P.), B., 720. Saponification of cellulose esters, (P.), B., 765. Liquid treatment of yarns, (P.), B., 946.
- and Moss, W. H., cellulose derivative compositions, (P.), B., 599. Protective coverings [for rubber insulation], (P.), B., 684. Synthetic resins and compositions containing them, (P.), B., 737. Composite [fabric] articles, (P.), B., 943.
- and Sower, P. F. C., artificial filaments and other products containing organic derivatives of cellulose, (P.), B., 987. Artificial filaments, yarns, etc., (P.), B., 1040. Artificial filaments, foils, etc., containing organic derivatives of cellulose, (B.), B., 1040.
- and Taylor, W. I., textile materials [staple fibre], (P.), B., 17.
- Brit. Coal Products Co. (1928), Ltd., and Wallace, G. W., composition fuel, (P.), B., 8.
- Brit. Drug Houses, Ltd. See Golding, J.
- Brit. Emulsifiers, Ltd. See Bannister, A. R.
- Brit. Industrial Solvents, Ltd., and Langwell, H., condensation products from alcohols and phenols, (P.), B., 443.
- Langwell, H., and Connolly, E. E., condensation products from alcohols and phenols, (P.), B., 443.
- Brit. Jeffrey-Diamond, Ltd., and Pickering, J. W., apparatus for breaking coal, coke, and other materials, (P.), B., 977.
- and Woodhead, H., coal, coke, and similar crushers, (P.), B., 83.
- Brit. Maxium, Ltd. See Badger, F., and Day, L. G.
- Brit. Non-Ferrous Metals Research Association, and Callis, G. T., purification of copper, (P.), B., 153.
- Brit. Oxygen Co., Ltd., and Houseman, C. R., purification of gases [e.g., nitrous oxide], (P.), B., 544.
- Brit. Paint, Colour, & Varnish Manufacturers Research Association. See Hanstock, R. F.
- Brit. Plastics Yearbook, plasticity of moulding materials, (P.), B., 366.
- Brit. "Rema" Manufacturing Co., Ltd., air separators for use in conjunction with pulverisers, (P.), B., 50.
- and Howden, P., drying apparatus, (P.), B., 2. Air separators, pneumatic grading machines, or classifiers, (P.), B., 786.
- Brit. Resin Products, Ltd., and Mabey, H. E., [phenol-aldehyde] resinous compositions, (P.), B., 112.
- Brit. Thomson-Houston Co., Ltd., electric[al] insulating materials [containing rubber], (P.), B., 30. Metallic [cobalt-nickel-iron] alloys, (P.), B., 235. [Flexible dialkyd] synthetic resins, (P.), B., 279. Mercury-vapour generators, (P.), B., 435. Purification of gases, (P.), B., 440. Sulphuretted polymeride of acrylic acid, its derivatives or homologues, (P.), B., 467. Sponge-like regenerated cellulose structures particularly for electric insulation, (P.), B., 491. Magnetic materials; [aluminium-nickel-iron alloys], (P.), B., 504. Centrifuge pots or buckets such as are used in manufacture of rayon, (P.), B., 624. Halogenated hydrocarbon compounds [suitable as dielectric materials], (P.), B., 773. Electric welding fluxes, (P.), B., 812, 958. Halogenated hydrocarbon compounds, (P.), B., 939. [Arc]-welding electrodes, (P.), B., 958, 1000. Mercury boilers, (P.), B., 977, 1027. Treatment of graphite, (P.), B., 1082. Dielectric and cooling media for electrical apparatus, (P.), B., 1100. Hard [sintered carbide] alloys, (P.), B., 1148.
- and Allgem. Elektrizitäts-Ges., oxide coatings, (P.), B., 236. [Binders for] electrical insulating materials, (P.), B., 275. Photo-electric cells, etc., (P.), B., 507. Spot-welding, (P.), B., 681. Dielectrics, (P.), B., 911.
- Brucker, G. W., and Morton, L. W., anodes of mercury-vapour rectifiers, (P.), B., 1001.
- and Clark, F. M., liquid insulating compositions for electrical apparatus, (P.), B., 773.
- and Comp. Lorraine de Charbons pour l'Electricité, hard carbide alloys, (P.), B., 810.
- and Davies, L. J., electric-discharge devices [mercury-vapour lamp], (P.), B., 1149.
- and Fairbrother, J. A. V., electric-discharge devices [neon tubes], (P.), B., 1100.
- Kienle, R. H., and Schlingman, P. F., [phenol-formaldehyde] resinous compositions, (P.), B., 240.
- Nerad, A. J., and Newkirk, B. L., cleaning of mercury boilers, (P.), B., 435.
- Ruff, H. R., Scott, W. J., and Davies, L. J., electron-discharge devices, (P.), B., 1101.
- Scott, W. J., electric-discharge devices [mercury-vapour lamp], (P.), B., 1149.
- Brit. Thomson-Houston Co., Ltd., and Zabel, W. P., filaments for electric lamps, etc., (P.), B., 812.
- Brit. Unit Heater Co., heat-interchanging apparatus for heating or cooling air, gases, or other fluids, (P.), B., 129.
- Brit. Xylonite Co., Ltd. See Sproston, F.
- Britton, E. C. See Dow Chem. Co.
- Britton, H. T. S., physico-chemical studies of complex acids. XIII. Constitution of quinquivalent and quadri-valent vanadium solutions with note on their respective reduction and oxidation, A., 35.
- and Dodd, E. N., physico-chemical studies of complex formation involving weak acids. XII. Complex anions of cuprous and auric cyanides, A., 305.
- and Jarrett, M. E. D., physico-chemical studies of complex formation involving weak acids. XIII. Reactions of malonic acid with typical metallic bases, A., 449.
- and Williams, W. G., electrometric studies of the precipitation of hydroxides. XIII. Constitution of aqueous solutions of silver oxide in ammonia, mono-, di-, and tri-methylamine and -ethylamine, pyridine, and ethylenediamine; dissociation constants of amines, A., 936.
- Britton, S. W., and Silvette, H., adrenal insufficiency in the marmot and opossum, and theories of cortico-adrenal function, A., 1421.
- See also Silvette, H.
- Briullova, L. P., haemolytic action of hydrocarbons, A., 1002.
- Brix, H. See Matossi, F.
- Brixworth Brick & Tile Co., Ltd. See Hamson, L. E.
- Broadfoot, A. See King, L. A. L.
- Broadway, L. F., molecular scattering by gases, A., 425.
- Broadwell, B. E., Werking, L. C., and Nat. Carbon Co., Inc., filter medium, (P.), B., 1076.
- Brobański, B., argentometric semi-micro-determination of chlorine and bromine in organic substances, A., 101.
- Brochina, D. S. See Danilov, S. N.
- Brock, H. J., and Hubbard, R. S., glycosuria and lactosuria of pregnant and of lactating women, A., 1402.
- See also Hubbard, R. S.
- Brockett, S. H., Spiers, M. A., and Himwich, H. E., lipin components of lymph of the thoracic duct of the dog, A., 773.
- Brocklebank, E. W., and Mitford, W. B., distillation of solid carbonaceous material mixed with oil, (P.), B., 294. Destructive distillation of mixtures of coal and oil, (P.), B., 582. Distillation of materials containing hydrocarbons, (P.), B., 662. Apparatus for use in retorts for distillation treatment of materials containing hydrocarbons, (P.), B., 757.
- Mitford, W. B., and Lander, C. H., combined cracking and distillation of carbonaceous materials, (P.), B., 792.
- Brocklesby, H. N., blended fish oils for medicinal purposes, B., 1163.
- and Denstedt, O. F., bodying of pilchard oil, B., 159.
- Brockman, C. J., removal of copper ions from water by sodium aluminate, B., 432.
- Brockmann, H., and Roth, H., enantiomorphous natural dyes, A., 863.
- See also Kuhn, R.

- Brockway, L. O., crystal structure of stannite $\text{Cu}_2\text{FeSnS}_4$, A., 152. Molecular structure of germanium tetrachloride, A., 812.
- and Wall, F. T., electron diffraction investigation of non-metallic halides, A., 18.
- See also Pauling, L., and Sutton, L. E.
- Brocq-Rousseau, D., photo-sensitisation of a streptococcus, A., 900.
- Brode, W. R. See Piper, J. D.
- Broderick, T. M., and Hohl, C. D., differentiation in traps and ore deposition, A., 955.
- Brodersen, E. M., filter, (P.), B., 788.
- Brodil, J., composition of maple sap, A., 550.
- Brockorb, F. See Klempt, W.
- Brodovitch, A. I., application of vapour-sorption theories to recovery of benzene from coal gas by silica gel, B., 292.
- See also Kopelevitch, G. V.
- Brodovitch, K. I., and Golovko, N. A., semi-industrial tests of a vanadium catalyst with a low activation temperature, B., 268.
- See also Charmandarian, M. O.
- Brodzka, J. A. See Mikei, I. J.
- Brodski, A. I., Alexandrovitch, V. A., Slutskaja, M. M., and Scheludko, M. K., concentration of heavy water, A., 44.
- and Sack, A. M., Raman spectra of arsenic trichloride and of its mixtures, A., 1189.
- Sack, A. M., and Besugli, S. F., Raman spectra in solutions. I. Solutions of arsenic trichloride in carbon tetrachloride and benzene, A., 1053.
- Brody, J., and Körösy, F., krypton content of air, A., 468.
- Brody, S., and Procter, R. C., growth and development, with special reference to domestic animals. XXXV. Energetic efficiency of milk production and the influence of body-weight thereon, A., 1528.
- Procter, R. C., and Ashworth, U. S., growth and development. XXXIV. Basal metabolism, endogenous nitrogen, creatinine, and neutral sulphur excretions as functions of the body-weight, A., 651.
- Brodzka, T. See Szper, J.
- Broeker, J. F., characteristics of zinc sulphide and comparisons with other white pigments in outside house paints, B., 366. Exterior paints, B., 815.
- Brönsted, J. N., definition of the Gibbs potential, A., 691.
- and Nielsen, R. F., direct current in measurement of electrolytic conductance, A., 1340.
- Brötz, A. See Stoeckly, J. J.
- Brogdex Co. See Trowbridge, M. L.
- Brogdon, J. S., and Jones, R. T., jun., deodorant [for air in confined spaces], (P.), B., 704.
- Broili, H., Glocker, R., and Kiessig, H., $K\alpha$ X-ray lines of carbon and carbon compounds, A., 4. Ultra-soft Röntgen radiation and lattice binding forces, A., 1449.
- Glocker, R., and Langendorff, H., radiation quantum and photographic threshold, A., 4.
- Brokate, C. W. See Heise, G. W.
- Bromberg, A. See Shuvalov, S.
- Bromley, H. A., technique of glass electrode, A., 1218.
- Bromley, N. V. See Orechovitch, V. N.
- Bromund, W. H. See Holmes, H. N.
- Broniewski, W., and Levandovski, V., influence of sulphur on properties of copper, B., 996.
- and Pietrek, W., structure of nickel-cobalt alloys, A., 1065.
- and Trzebski, S., mechanical properties of copper-zinc alloys, B., 231.
- Bronkhorst, W. A. van, chemical and physiological examination in connexion with the alkaloids of *Aconitum napellus*, L., B., 1022.
- Bronner, H., pH of bile in relation to gall-stone formation, A., 384.
- Brons, P., predissociation in the third positive group of carbon monoxide, A., 805.
- Brons, H. H., electronic states of the N_2^+ molecule and their energies of dissociation, A., 144.
- Bronstein, M., scattering of neutrons by protons, A., 1440.
- Brook, G. B. See Brit. Aluminium Co.
- Brook Hill Farm, Inc. See Farr, S. M.
- Brooke, F. W., and Swindell-Dressler Corp., apparatus for heat-treating material, (P.), B., 1121.
- Brooker, L. G. S., and Keyes, G. H., new sensitizers for photography of the infra-red; tetra- and penta-carbo-cyanines, A., 634.
- and White, F. L., cyanine dye series. I. Method of preparing certain carbo-cyanines, A., 630.
- See also Eastman Kodak Co.
- Brooks, A. G. See Shortt, H. E.
- Brooks, B. T., origin of petroleum, A., 609.
- Increase in uses of anhydrous ammonia in [petroleum oil] refining practice, B., 483. Synthetic alcohols and related products from petroleum. I. Olefine raw materials. II. Manufacture of alcohols and esters, B., 536.
- and Standard Alcohol Co., sulphated derivatives of butene, (P.), B., 715.
- Brooks, D. B., psychrometric charts for high and low pressures, A., 599.
- Brooks, E., [pre-shrinking] treatment of [cotton] textile [fabrics], (P.), B., 303.
- Brooks, H. E. See Gray, R. A. H.
- Brooks, M. E. See Dow Chem. Co.
- Brooks, M. M., effect of methylene-blue and other oxidation-reduction indicators in experimental tumours, A., 515.
- Treatment of methaemoglobin in the blood by glucose, A., 1141. Does methylene-blue form methaemoglobin? A., 1158.
- Brooks, S. C., accumulation of ions: relations between protoplasm and sap in *Valonia*, A., 1431.
- Brooks, W. D. W., calcinosis, A., 885.
- Broomé, B. See Aminoff, G.
- Brouet, R., hyposulphites and sulphonylates in [beet] sugar manufacture, B., 869.
- Brosa, S. See Torres, I. C.
- Brosheer, J. C. See Prutton, C. F.
- Brosnan, W. F., fireproofed textiles, B., 492.
- Bross, W., and Kubikowski, P., adsorption by erythrocytes of substances in blood, especially adrenaline, A., 790.
- Brosset, C., crystal structure of alkali tungsten chlorides $[\text{M}_2\text{W}_2\text{Cl}_6]$, A., 812.
- Brosteaux, J. See Putzeys, P.
- Brot. See Vidal.
- Broudy, H., control of Fuller's rose beetle (*Asynonychus godmani*, Crotch) in commercial greenhouses, B., 778.
- Broughton, M. N., secondary selenite crystals in tertiary strata in Texas, A., 725.
- Broughton, W. W. See New Jersey Zinc Co.
- Brown, A. S., catalytic desulphurisation of shale gasolines from Kashpira tar in presence of hydrogen and under atmospheric pressure, B., 392.
- See also Orlov, N. A.
- Brown, D., and Scheiner, H., physico-chemical state of hormones in blood; diffusion of oxytocic pituitary principle in dog- and ox-serum, A., 1284.
- See also Tiffeneau, M.
- Brown, G. O., and Briggs, A. P., haemoglobin and blood-cell relations as determined by iron and oxygen capacity methods, A., 229.
- Brous, S. L., and Semon, W. L., koroseal, a new plastic: properties and uses, B., 735.
- Brouwer, E., influence of mineral-acid silage on acid:base equilibrium [in cattle], B., 572.
- Brown, A. See Drake, T. G. H.
- Brown, A. B. See Standard Oil Co. of Indiana.
- Brown, A. F., white, black, and coloured pigments, B., 510.
- Brown, A. R., effect of low-voltage cathode rays on photographic film, A., 1332.
- Brown, A. S., and MacInnes, D. A., determination of solubility of silver chloride by an electrometric titration method, A., 576.
- Brown, (Miss) B. See Friedman, L.
- Brown, B. E. See Jacob, K. D.
- Brown, B. H., and Lewis, H. B., specific rotation of cystine excreted in cystinuria, A., 1401.
- Brown, B. K. See Standard Oil Co.
- Brown, B. R. See Perkin, H. J.
- Brown, C. L. M., methyl, isopropyl, and amyl alcohols in ethyl alcohol; vanillin as a reagent for their detection and approximate determination, B., 137.
- Non-staining iodine ointments, B., 923.
- Brown, C. R., determination of ignition temperatures of solid materials, B., 707.
- Brown, C. W., dissolved oxygen in mill solutions [from cyaniding gold ores], B., 105.
- Brown, D. J. See Andrews, L. V., and Lowe, W. G.
- Brown, E. D. See Cone, C. N.
- Brown, E. V. See Gilman, H.
- Brown, F. See Brit. Celanese.
- Brown, F. L., index of refraction of carbon dioxide as a function of density, A., 14.
- Brown, F. W., and Dunn, C. G., atomic wave functions, A., 9.
- Brown, G. E. See Gilman, H.
- Brown, G. G., solution cycles as applied to step-up transformers for temperatures, B., 529.
- and Singer, S. C., jun., relative values of different fuels of the same octane number, B., 212.
- Souders, J., jun., Nyland, H. V., and Hesler, W. W., design of fractionating columns. II. Number of plates for gas and gasoline fractionators, B., 577.
- See also Huntington, R. L., and Lindsay, J. D.
- Brown, G. H., and Metal & Thermit Corp., colouring ceramic materials, (P.), B., 356.
- Brown, G. I., and Dale, (Sir) H. H., pharmacology of ergometrine, A., 1531.

- Brown, G. S. See Bennett, R. D.
- Brown, Henry, surface and interfacial tension of mercury by the sessile drop and drop-weight methods, A., 160.
- Brown, Herman, modification of the Folin-Wu blood-sugar method using permanent standards, A., 1142.
See also Schamberg, J. F.
- Brown, H. E., requirements of materials for weaving Fourdrinier [paper-machine] wires, B., 272.
- Brown, H. P. See Imperial Chem. Industries.
- Brown, H. W., and Lamson, P. D., oral toxicity of 6-alkyl-*m*-cresols, A., 656. Oral toxicity of *o*-*n*-alkylphenols to white rats, A., 1020.
See also Lamson, P. D.
- Brown, J. B. See Ault, W. C.
- Brown, J. F. See Ogston, A. G.
- Brown, J. H. See Simon-Carves, Ltd.
- Brown, J. M., automatic vacuum-pan control [in sugar boiling], B., 201.
- Brown, J. R. See Lovell, H. W.
- Brown, J. W. See Lucia, S. P.
- Brown, K. W., occurrence and control of iron bacteria in water supplies, B., 127.
- Brown, L. A., phosphorus penetration and availability in soils, B., 565.
- Brown, L. S., bleeding of cements, B., 592.
- Brown, M. G. See Sawyer, M. E. McK.
- Brown, P. E., and Boatman, J. L., effects of various amounts of fertilisers, applied at different times in the rotation, on crops and soil conditions in the Wisconsin Drift soil area, B., 1011.
- Boatman, J. L., and Smith, F. B., character and management of alkali soils of Iowa, B., 1156.
- and Walker, R. H., base exchange in Iowa soils, B., 421.
See also Smith, F. B., and Walker, R. H.
- Brown, R. F., preservative and vermin-destroying compositions [for timber], (P.), B., 309.
- Brown, R. L., and Atmospheric Nitrogen Corp., acetic acid, (P.), B., 139, 442.
- Brown, R. S., Barnes, W. H., and Maass, O., thermal properties of deuterium oxide and their interpretation, A., 1198. Specific heats of liquid deuterium oxide, A., 1454.
- Brown, R. V. See Nat. Aniline & Chem. Co.
- Brown, S., Hanson, E. R., and Halowax Corp., purification of chloronaphthalenes, (P.), B., 140.
- Brown, S. L., and Sullivan, J. D., solution of copper minerals, B., 499.
- Brown, W., mechanism of disease-resistance in plants, B., 73.
- Brown, W. B., and Farmer, E. H., unsaturated acids of natural oils. I. Highly unsaturated acids from oiticica oil (*Licania rigida*). III. Highly unsaturated acid of the kernels of *P. macrophyllum*, A., 607, 1041.
- Brown, W. C. See Thurston, L. M.
- Brown, W. D., sponge iron, (P.), B., 1051.
- Brown, W. G., and Daggett, A. F., plant for production of heavy water, A., 723.
- Brown, W. H., use of treated timber in railway stock construction, B., 852.
- Brown, W. J., determination of tellurium in tellurium-lead and tellurium antimonial lead, B., 64.
- Brown, W. L., chemistry of pigments of pepper; red pigment in the perfection pimento (*Capsicum annuum*), A., 1040.
- Brown, W. R. See Beeston, W. G.
- Brown Co., and Richter, G. A., paper manufacture, (P.), B., 352.
See also Hill, R. B., Richter, G. A., Schur, M. O., Sherman, J. C., and Yates, J. A.
- Brown Instrument Co. See Harrison, T. R.
- Brownback, H. L., composition for joints, (P.), B., 290.
- Browne, A. W. See Craik, J., Frierson, W. J., Hought, A. G., and Howard, D. H., jun.
- Browne, F. L., priming-coat reductions for painting new wood surfaces, B., 160. Special priming paints for wood, B., 464. Painting characteristics of hardwoods, B., 598.
- Browne, F. S., nutrient requirements of apple trees, B., 117.
- Browne, H. C. See Klugmann, Arthur.
- Browne, J. S. L. See Collip, J. B.
- Brownell, G. L., treatment of filamentary material, (P.), B., 400.
- Brownell, K. W. See Melton, R. L.
- Browning, B. L., and Kress, O., factors influencing formation and dissociation of sulphur trioxide in sulphur burner gases for sulphite pulping, B., 590.
- Browning, C. H., Gulbransen, R., and McCartney, W., trypanocidal action of styrylselenazole compounds, A., 1283.
- Gulbransen, R., and Tucker, S. H., antiseptic action of carbazole-3-diazonium chloride and other diazonium compounds; preparation of carbazole-3-diazonium chloride, A., 1283.
- Brownlee, M. A. See Strang, J. M.
- Brownmiller, L. T., system lime-potash-alumina, A., 448.
- Brownscombe, E. R. See Fricke, H.
- Brownsdon, H. W. See Imperial Chem. Industries.
- Brü, L., diffraction of electrons by colloidal gold, A., 572.
- Brubaker, M. M. See Du Pont de Nemours & Co., E. I.
- Brubaker, W. M., and Bonner, T. W., automatic high-pressure cloud chamber, A., 839.
See also Bonner, T. W.
- Bruce, E. L., spectrographic examination of quartz from gold-bearing veins, A., 602.
- Bruce, J. A. See Aston, B. C.
- Bruce, R. N. B. D. See Hollings, H.
- Bruce, W. F., growth of bacteria in organic acid media, A., 536. Preheater in micro-analytical determination of carbon and hydrogen, A., 1140. Relationship between molecular structure, p_H , and the ability of bacteria to grow in solutions of salts of organic acids, A., 1282. *iso*Citric [α -hydroxypropane- β -tricarboxylic] acid from blackberries, A., 1352. Analysis of small volumes of gas by means of the usual micro-analytical apparatus, A., 1476.
- Bruch, E., crystalline insulin. II. (Appendix), A., 789.
- Brucite Processes, Inc. See Howes, R. T.
- Bruck, H. See Minkowski, R.
- Brucker, G. W. See Brit. Thomson-Houston Co.
- Bruckman, H. W. L., and Haalebos, M. G. A., electrical properties of mineral oils, B., 1125.
- Bruckner, V. [with Krámlí, A., and Vinkler, E.], sensitivity of β -amino- and β -hydroxylamino- α -alkoxyphenyl-propyl alcohols to alkali, A., 972.
and Kárdos, V., use of the ψ -nitrosites of propenylphenol ethers for synthesis of β -hydroxylamino- and β -amino- α -arylpropanols; wandering of acyl groups; methylisocugenol and *iso*safrole derivatives, A., 972.
and Krámlí, A., use of ψ -nitrosites of propenylphenol ethers for synthesis of α -aryl- β -hydroxylamino- and β -amino-propyl alcohols; migration of acyl groups. II. *iso*Eugenol derivatives, A., 1362. Synthesis of ephedrine derivatives, A., 1493.
and Vinkler, E., rearrangement of ψ -nitrosites of propenylphenyl ethers; synthesis of β -nitro- α -alkoxyphenylpropanols and their methyl ethers, A., 971.
- Brüchanov, A. E., application of the aërometer in investigating small density changes of metals, A., 59.
- Brüche, E., electron microscope and its application, especially to study of thin films on metals, A., 161.
and Knecht, W., increased resolving power of the electron-optical immersion objective, A., 189. Electron-optical observation of transformations of iron between 500° and 1000°, A., 1451.
- Brück, L. See Lassen, H.
- Brücke, F. T., nicotine-like action of choline, acetylcholine, and "cholzyl" on sympathetic ganglia, A., 529.
- Brückner, H., true and mean specific heats of technically important gases, B., 898. Progress in the field of town's gas production and gas purification, B., 979.
- and Bloch, A., gas analysis. II. Determination of oxygen with alkaline solutions of trihydroxybenzenes and of sodium hyposulphite in varying concentrations, B., 947.
- and Gröbner, W., gas analysis. I. Determination of carbon monoxide with various cuprous chloride solutions, B., 590.
- and Gruber, H., suitability of various technical oils as benzol wash oils, B., 211.
- and Lang, A., refining of low-boiling hydrocarbons by condensation processes, B., 535.
- and Ludewig, W., importance of coal petrography in the gas industry, B., 388. Drying and removal of residual impurities of town's gas with silica gel, B., 756.
- and Schöneberger, R., ignition temperatures of hydrocarbons, B., 935.
See also Bunte, K.
- Brückner, J., sensitive and specific reaction for ergosterol, A., 228.
- Brüggemann, H. See Stotz, H.
- Brüll, L., apparent and real activity coefficients in solutions of electrolytes. II, A., 34. Resonance energy in diphenyl and its derivatives, A., 569. Activity in mixtures of strong electrolytes, A., 582. Heats of combustion of diphenyl derivatives, A., 584.
- Brümmer, F. See Fricke, R.
- Brün, W., and Remington Arms Co., Inc., priming mixture, (P.), B., 127, 704.

- Brün, W., and Remington Arms Co., Inc., chemical compounds [basic lead 3-nitrophthalates] and priming mixtures containing them, (P.), B., 751. Basic lead salts of 3:5-diinitrobenzoic acid, (P.), B., 751.
- Brüne, F., influence of time of cutting on yield of high-moor meadows and nutrient content of the hay, B., 1061. and Husemann, C., weed control in cereals on high-moor soils, B., 73. and Igel, H., manuring high-moor pastures with nitrogen, B., 1060.
- Brünger, K. See Fischer, W., and Geilmann, W.
- Bruevitch, S. V., and Varfolomeeva, F. E., rapid potentiometric determination of minute quantities of chlorides, A., 947.
- Bruger, M., state of cholesterol and nature of cholesterol-protein complex in pathological body-fluids, A., 517. and Mosenthal, H. O., immediate response of plasma-cholesterol to injection of insulin and of adrenaline in human subjects, A., 411. See also Mosenthal, H. O.
- Bruggeman, D. A. G., elastic moduli for different textures of regular metals, A., 154.
- Bruhath, G., and Grivet, P., rotatory power of quartz for rays perpendicular to the axis and its dispersion in the ultraviolet, A., 14.
- Bruhn, C. See Mumm, O.
- Bruhn, J. M., respiratory metabolism of infra-human primates, A., 777.
- Bruhn, L. C., Cheddar cheese, (P.), B., 1021.
- Bruhns, G., neutral copper solution for invert-sugar determination in crude sugar, molasses, etc., B., 568.
- Bruitet, A. See Leroide, J.
- Bruin, P., seasonal fluctuations in p_H of the soil, B., 513. and Have, J. ten, determination of magnesium carbonate and calcium carbonate in soil, B., 740.
- Bruins, E. M., Bikerman hypothesis concerning swelling pressure, A., 581.
- Bruins, P. F., and Smith Corp., A. O., heat-exchange apparatus, (P.), B., 386. Pickling [of ferrous metals], (P.), B., 907.
- Brull, L., reversibility of acidosis in acute uranium nitrate nephritis, A., 531. Technique of ultrafiltration with a cellophane membrane, A., 1342. and Hairs, E., experimental uranium nephritis: action of insulin on acidosis, A., 781.
- Poverman, R., and Lambrechts, A., influence of neutral salts on ultrafiltrability of serum-calcium, A., 104. See also Goffart, H.
- Bruman, F., influence of nutrition on metabolism. III. Effect of potassium on resting and working metabolism, A., 779. and Baumgartner, O., influence of nutrition on metabolism. II. Action of various proteins, A., 651.
- Brumberg, E. M., polariscope of high light intensity, A., 598.
- Brun, G. C. See Dam, H.
- Brun, H. See Lumière, A.
- Brun, J. See Tronstad, L.
- Brun, P., electric phenomena accompanying formation of organic magnesium compounds, A., 827.
- Bruna, R. See Francesconi, L.
- Brunauer, S., and Emmett, P. H., use of van der Waals adsorption isotherms in determining surface area of iron synthetic ammonia catalysts, A., 1329.
- Brundage, J. T. See Gruber, C. M.
- Brunelli, A., organic coefficient of raw beet sugar, B., 423.
- Brunelli, B., B., biological control of follicular and luteal preparations; presence in the corpus luteum of a substance with action resembling that of insulin; ovarian hormones and carbohydrate metabolism, A., 1284.
- Bruner, D. W., influence of nutritive conditions on acid-fastness of bacteria, A., 408.
- Bruner, F. H., and Schlundt, H., constancy of the uranium-actinium ratio in minerals, A., 322.
- Bruner, W. M. See McMaster, L.
- Bruneteau, M., building-up of steel rails: the deposited metal, B., 594.
- Bruni, G., possibility of separating D_2O from H_2O by fractional freezing, A., 48. and Ferrari, A., isomorphism of compounds of elements of different valencies, A., 284.
- Brunings, J., new "annihilation" process of positive electrons, A., 8.
- Brunjes, A. S., and Furnas, C. C., vapour-liquid equilibrium data for commercially important systems of organic solvents; binary systems *n*-butyl alcohol-*n*-butyl acetate and *n*-butyl alcohol-acetone, B., 584.
- Brunke, F., investigations with pure α -, β -, and γ -manganese, A., 19.
- Brunner, E. See Pauli, W.
- Brunner, J., and Hammerschmid, H., [electrical conductivity of compressed graphite powder], A., 683.
- Brunner, R. See Baur, E.
- Brunning & Co., Inc., C. See Murck, K.
- Bruno, A., refining and nutritive value of flour, B., 570.
- Bruno, S. See Tocco, L.
- Brunovski, B. See Sedletzki, J.
- Brunovski, B. K. See Zvjagintsev, O. E.
- Bruns, B., and Ablezova, K., mechanism of ethylene hydrogenation on platinum, A., 589. See also Frumkin, A.
- Bruns, H., and Pabst, simple apparatus for controlling addition of hypochlorite for sterilisation of water, B., 256.
- Brunson, A. M. See Melchers, L. E.
- Brunstrum, L. C. See Standard Oil Co.
- Brunt, N. A., mass action, A., 1076.
- Brus, G., and Bonichon, comparison of American and French pine oils, B., 524. and Véra, J., transformation of camphene into isobornyl esters, A., 1375.
- Brush, G. D. See Hartford, F. M.
- Brush Electrical Engineering Co., Ltd. See Dunkerley, H. M.
- Brusilovskaja, A. I. See Lazarev, N. V.
- Bruskin, J. M. See Muschkatblat, M. M.
- Bruson, H. A., and Resinous Products & Chem. Co., Inc., octylphenols and ethers thereof, (P.), B., 1132. Coating composition, (P.), B., 1152.
- Robinson, J. D., Stein, O., and Resinous Products & Chem. Co., driers for oils, paints, and varnishes, (P.), B., 366. and Stein, O., organic acids giving oil-soluble metallic salts; relationship between structure and solubility, B., 584.
- Bruson, H. A., Stein, O., and Resinous Products & Chem. Co., siccativ composition, (P.), B., 642.
- Bruton, G. L. See Shands, E. H.
- Brutzkus, E. B. See Jofa, Z. A., and Vengerova, V. J.
- Brutzkus, M., combustion processes in [internal-combustion] engines, B., 133. Occurrence of knocking in fuels, B., 179. Calculation of the calorific value of technical fuels, B., 834. *A priori* estimate of value of commercial motor fuel, B., 1031.
- Bruun, J. H., reflux regulator for laboratory stills, A., 1342.
- Bruyant, G. V. See Distillation à Basse Temp. & Auto-Agglomération des Combustibles.
- Bruylants, P., properties and structure of maleo- and citracono-nitriles, A., 738.
- Bruynoghe, G., hæmoglobin, A., 508. Iso-antigenic power of ovalbumin, A., 644.
- Bryan, A. H., Evans, W. A., jun., Fulton, M. N., and Stead, E. A., jun., diuresis following administration of salyrgan: its effect on the sp. gr., the total nitrogen, and colloid osmotic pressure of the plasma of normal and oedematous dogs, A., 1019. See also Scriver, W. de M.
- Bryan, A. L. See Knauss, H. P.
- Bryan, A. M., inert dust used in coal mines, B., 482.
- Bryan, H. F. See Macht, D. I.
- Bryan, J. M., effect of ferrous iron in solutions of citric acid of different p_H on corrosion of iron in presence of a limited supply of air, A., 43.
- Bryan, O. C., and Camp, J. P., concentration and movement of nitrate-nitrogen in Florida citrus soils, B., 38.
- Bryant, G. R., Govers, F. X., and Indian Refining Co., removal of wax from hydrocarbon oils, (P.), B., 617.
- Bryant, S. A. See Campbell, W. G., and Johnson, C. H.
- Bryant, W. M. D., crossed axial plane dispersion in two organic compounds; a peculiar extinction phenomenon, A., 810. Relationship between cholesterol and carotene structures, A., 1493. and Smith, D. M., hydroxylamine method for the determination of aldehydes and ketones; displacement of oxime equilibria by means of pyridine, A., 370. See also Smith, D. M.
- Bryant Electric Co. See Cunningham, R. H.
- Bryde, O. See Borchers, E.
- Bryden, J. See Hannay, W. H.
- Bryner, F. See Dow Chem. Co.
- Bryson, H. C., inhibition of mould growth on paint, B., 160.
- Brzustowska, H. See Swientoslawski, W.
- Bubblestone Co. See Rice, J. A.
- Bubeck, W., lattice constants and m.p. of berzelites, A., 1451. and Machatsehi, F., crystal structure of berzelite, A., 571.
- Buc, H. E. See Standard Oil Development Co.
- Buch, K., colorimeter tube for p_H determination, A., 316, 1340.
- Buchanan, A. B., oilcloth [backing], (P.), B., 161.
- Buchanan, G., and Pennsylvania Crusher Co., crusher construction, (P.), B., 1074.
- Buchanan, J. C. R. See Mackay, R.

- Buchanan, J. H. See Hixon, R. M., and Nelson, P. M.
- Buchanan, J. W., analysis of physiological states responsible for antero-posterior disintegration in *Planaria dorotocephala*, A., 657.
- Buchanan, K. S. See Sure, B.
- Buchanan, (Miss) M. A. See Coleman, G. H.
- Buchartzev, M. M. See Sokolov, A. D.
- Buchbinder, L. See Deskowitz, M. W.
- Buchheim, W., influence of intermolecular action on Raman effect for liquids, A., 1446.
- Buchholz, J., benzoquinone-gelatin gels, A., 445.
- Buchholtz, H. See Müller, E. W.
- Buchholtz, W. F., rôle of damping-off diseases in relation to failures of lucerne stands on acid soils, B., 167. Relation of soil acidity to a seedling disease of lucerne on three Iowa soils, B., 691.
- Buchler, C. C. See Standard Oil Co.
- Buchman, E. R., and Williams, R. R., crystalline vitamin-B₁. IX. Action of concentrated hydrochloric acid, A., 1385.
- Williams, R. R., and Keresztesy, J. C., crystalline vitamin-B₁. X. Sulphite cleavage. III. Basic product, A., 1510. See also Williams, R. R.
- Buchner, G., chemical examination of waxes and wax compositions, B., 560.
- Buchta, J. W., and Goetz, A., thermal expansion of bismuth single crystals near the m.p., A., 156.
- See also Goetz, A.
- Buck, J. S., Hjort, A. M., and De Beer, E. J., relative anæsthetic effects of various carbamides, A., 1155.
- See also De Beer, E. J., and Hjort, A. M.
- Buckeye Twist Drill Co. See Rodman, C. J.
- Buckingham, R. A. See Hulme, H. R.
- Buckland, I. K., Brauns, F., and Hibbert, H., lignin and related compounds. XVI. Phenol-lignin from spruce wood, from Freudenberg spruce lignin, and Willstätter spruce lignin, A., 1373.
- Buckley, H. E., mosaic structures of crystals, A., 16. New evidence, setting an upper limit of 500 Å. or less, to dimensions of mosaic blocks (if any) in a crystal, A., 150.
- Buckley, J. R. See Du Pont de Nemours & Co., E. I.
- Buckley, T. A., solid and liquid components of palm oil, B., 859.
- and Greig, J. L., continuous refining of palm oil, B., 1002.
- Buckley, W. D. See McKesson, C. L.
- Buckman, S. J., Schmitz, H., and Gortner, R. A., movement of liquids in wood, B., 408.
- Bucknall, E. H. See Jenkins, C. H. M.
- Bucy, E. H., and Atlas Powder Co., composition yielding ["crackle" varnish] films, (P.), B., 367.
- Budd Manufacturing Co., E. G., and Tarbox, J. P., [spot-welding [sheet material], (P.), B., 681.
- Budde, H., volumetric determination of barbituric acid derivatives, B., 45.
- Buddington, A. F., high-temperature mineral associations at shallow to moderate depths, A., 955.
- Budhalakoti, U. D., and Mukherji, K. C., Kaufmann's thiocyanogen value of Indian butter fat (ghee), B., 1053.
- Budiloff, N. See Jenny, A.
- Budnikov, P. P., high quality "semi-acid" refractory brick, B., 307.
- Heat of hydration of mortars, B., 547.
- Pozzuolanic material from residues in aluminium chloride manufacture, B., 547.
- Razdorov clays, B., 725.
- Residue from aluminium chloride preparation as puzzuolana addition to Portland cement, B., 1095.
- and Gulinov, L. G., determination of active silica in puzzuolana, A., 317.
- Influence of burning temperature of anhydrite, gypsum, and dolomite on properties of clinkerless slag cements, B., 101.
- Blast-furnace slag, and its utilisation in the Portland cement industry, B., 725.
- and Guzev, V. K., clay-estrich gypsum cement, B., 725.
- and Kassiyani, N. S., effect of preliminary grinding of quartz sand on quality of Dinas brick, B., 227.
- and Kvitnitski, A. B., utilisation of waste products of preparation of aluminium chloride from kaolin, as filler for acid-resistant cements, B., 950.
- and Nirenshtein, D., action of carbon monoxide on fireclay, B., 496.
- and Pines, B. J., constituents and properties of "Radex" magnesite brick, B., 546.
- Shicharevitsch, S. A., and Lukova, S. D., refractory lining for rotating ovens for production of sulphuric acid and Portland cement from gypsum, B., 23.
- Chemically inert heat-refractory materials for ovens for sodium sulphide production, B., 406.
- and Solomonov, M. Y., ceramic value of the by-product in production of aluminium chloride from kaolin, B., 453.
- See also Adadurov, I. E.
- Budnizki, D. Z., Kurtshatov, I. V., and Latischev, G. D., disintegration of lithium by slow neutrons, A., 1296.
- Budó, A., triplet band formula for the general intermediate case, and its application to the $B^2\pi, C^2\pi$ terms of N₂, A., 1291.
- Büchi, J., determination of content and keeping properties of Spiritus formicæ Ph.V., B., 1117.
- Determination of alkaloids and extraction of ipecaçuanha root, B., 1117.
- Buechling, W. J. See Johnson, E. R.
- Büchner, A., measurement of dielectric constants, A., 1475.
- See also Eucken, A., and Tammann, G.
- Büchting, W. A., pectin from sugar beet, (P.), B., 969.
- Büding, E., action of chloroform on lipin-phosphorus content of guinea-pig liver, A., 779.
- See also Stefanopoulo, G. J.
- Bühler, G., bearing brasses, (P.), B., 680.
- Bühler, H., and Pügel, W., influence of degree of drawing and tempering on internal stress in steel wires, B., 62.
- and Tonn, W., internal stress [in steel produced] by precipitation-hardening, B., 62.
- Buehrer, T. F. See McGeorge, W. T.
- Bueker, E. D. See Schmitt, F. O.
- Bülbring, E., and Burn, J. H., sympathetic dilator fibres in muscles of the cat and dog, A., 1410.
- Buell, M. V., adenine-nucleotide content of human blood. I. Determination and content, A., 373.
- and Strauss, M. B., glycogenetic function of the liver in experimental hyperthyroidism, A., 384.
- Büll, R., physico-chemical measurements in the [petroleum] oil industry; the dielectric constant, B., 888.
- and Moc, J. H., dielectric methods of investigation in the chemical laboratory; the dielectric constant, A., 58.
- Bülów, H. See Schuster, F.
- Bülów, M. See Page, I. H., and Plant, F.
- Bünger, H., summary of feeding trials of fish meals for pigs, B., 922.
- Kirsch, W., and Richter, K., feeding trials with wood-sugar yeast for milch cows, B., 122.
- See also Bömer, A.
- Bünger, W. See Bömer, A.
- Bünning, E., growth and nitrogen assimilation of *Aspergillus niger* under influence of growth regulators and of vitamin-B, A., 254.
- Cell physiology of sea algae. I. Suction force of *Elachisten*. II. Permeability changes in plasmolysis. III. Stimulated plasmolysis and plasmastrophie, A., 671.
- Bürgel, production, properties, and processing of hardened papers, B., 447.
- Buerger, L. R., nitrogenous glycosides. III. Preparation of a simple cyanophoric glycoside, A., 69.
- and Johnson, T. B., pyrimidines. CXLIII. Preparation of derivatives of uracil, A., 358.
- Bürger, M., effect of crystalline insulin on substances of the residual carbon group, A., 127.
- Horn, F., and Ruppert, V., crystalline insulin. VII. Influence on "residual carbon" and lactic acid of the blood, A., 901.
- and Kohl, H., crystalline insulin. VI. Influence on liver-glycogen, A., 901.
- and Möbius, W., iodine and cholesterol content of blood as related to essential hypertension, A., 383.
- Buerger, M. J., lincoag structure of crystals, A., 16. Non-existence of a regular secondary structure in crystals, A., 16. Unit cell and space-group of realgar, A., 323.
- Silica framework crystals and their stability fields, A., 812.
- Buerger, N. W., unmixing of chalcocopyrite from sphalerite, A., 841.
- Copper ores of Orange County, Vermont, A., 1101.
- Bürgin, A. See Reber, K.
- Bürker, K., new hamoglobinometer, the "orthohæmometer," A., 999.
- Bürl, B. See Kallanner, O.
- Buess, H. See Fiechter, F.
- Büsem, W., lattice state of reacting crystal phases in the X-ray diagram, A., 1059.
- Fischer, H., and Gruner, E., structure of silicon disulphide, A., 1450.
- Büttenbender, G., and Herzberg, G., structure of the second positive nitrogen group and predissociation of the N₂ molecule, A., 271.
- Büttner, G., chemical criteria for brandy, B., 871.
- Büttner, H. E., behaviour of residual nitrogen in blood following administration of arsenic, phosphorus, and sodium chlorate and in oxygen deficiency, A., 120.

- Buff, C. T., Heinrich, R., and Internat. Precipitation Co., electrical precipitation apparatus [for gases], (P.), B., 363.
- Buffalo Electro Chemical Co., Inc. See Bosing, E. A.
- Buffalo Foundry & Machine Co. See Neubauer, H. E.
- Buffle, J. See Joukovsky, E.
- Buhrig, W. H., Schultz, A., Frey, C. N., and Standard Brands, Inc., compressed yeast product, (P.), B., 696.
- Buiko, G. See Fabritzjev, B.
- Buividaite, (Frl.), M., reduction of ammonium ruthenate: alkali tetra-halogen ruthenium compounds, A., 594.
- Buizov, B. V., Molodenski, V. S., and Mikhailov, N. I., chlorination of dis-aggregated rubber, B., 512.
- Bukhsh, M. W., Desai, R. D., and Hunter, R. F., formation and stability of poly-bromide derivatives of heterocyclic compounds. IV. Hydrodibromides and hydrotetrabromides of some 1-dimethyl-aminobenzthiazoles, A., 503.
- Bukin, V. N., Izmailova, N. A., and Bogochunaz, A. P., influence of cooking of vegetables on preservation of vitamin-C, A., 417.
- and Povolotskaja, K. L., chemical methods in determining vitamin-C, A., 416.
- Povolotskaja, K. L., and Glazunov, M. F., biological method for determining vitamin-C, A., 416.
- Povolotskaja, K. L., and Onokhova, N. P., antiscorbutic vitamin in northern varieties of fruits, berries, and vegetables, A., 417.
- See also Povolotskaja, K. L.
- Bulian, W., investigations with cuprous oxide photo-cells. II. Fatigue phenomena, A., 282.
- Bulina, J., and Steiner, V., desulphuration of pig iron, B., 807.
- Bulif, J., polarimetric determination of sucrose, invert sugar, and starch syrup in pure sugar syrups, fruit syrups, and marmalades, and determination of starch syrup in these products, B., 202.
- Bull, B. A., Ross, W. E., and Fuson, R. C., haloform reactions. XV. Stepwise halogenation, A., 751.
- Bull, H. B., electrokinetics. XIV. Critical comparison of electrophoresis, streaming potential, and electro-osmosis. XV. Use of inert electrodes in measuring streaming potential, A., 450, 933.
- Bull, H. I. See McBain, J. W.
- Bull, (Miss) J. E., Fitzgerald, J. S., Packer, J., and Thorpe, F. J., glutamic acids. XXIV. Catalytic effect of alkalis on rate of racemisation of *l*-trans- α -dimethyl-glutaconic acid, A., 66.
- Bullard, E. C. See Massey, H. S. W.
- Bullard Co., electrochemical processes, (P.), B., 811.
- See also Dunn, T. E.
- Bullen, F. J., [steel] tube corrosion, B., 190.
- Buller, E. L., preparation of fine anthracite coal for use in filter plants [for water], B., 1078.
- See also Jones, O. J.
- Bullock, B., and Kirk, P. L., volumetric micro-determination of chloride and potassium ions; application of potassium method to sea-water, A., 835. Microscopy of the amino-acids and their compounds. I. Phosphotungstates and phosphomolybdates, A., 1516.
- Bullock, F. J., and Papee Machine Co., mixing machine, (P.), B., 83.
- Bullock, H. C. S., determination of [average] temperatures of [flowing] liquids by use of thermometers, (P.), B., 1074.
- Bullock, K., assay and stability of commercial pepsin, B., 606.
- Bulthuis, H., spectrum of CO⁺, A., 1051.
- Bumm, E., relationship between cell metabolism and growth, A., 777.
- Bunbury, H. M. See Stewart, A.
- Bund, E. See Lipp, M.
- Bunde, L. F. See Waern, A. W.
- Bunet, P., induction furnaces, B., 681.
- Bungeroth, A. See Esser, H.
- Bunge, R., toxicity of ripe poppy capsules, A., 1532.
- Bunge, W. See Müller, Eugen.
- Bunker, S. W. See Wix, A., and Wix, M.
- Bunn, C. W., lattice dimensions of zinc oxide, A., 1307.
- Clark, L. M., and Clifford, I. L., constitution and formation of bleaching powder, A., 1214.
- Bunte, K., and Bloch, A., ignition temperatures of gases, B., 660. Ignition temperatures of gas mixtures, B., 933.
- Brückner, H., and Haas, G. R., removal of nitrogen oxides from town's gas by means of [feric oxide] gas-purification masses, B., 1124.
- Brückner, H., and Sanjana, J., Indian bituminous coals, with particular reference to their coking properties, B., 339.
- and Lang, A., influence of catalysts on thermal decomposition of paraffin hydrocarbons, B., 341.
- and Windorfer, K., relation between ignition temperature and reactivity of high-temperature cokes from bituminous coals, B., 1123.
- Buntin, A. P., and Bikov, M. M., formation of hydrogen carbonates in the system CaCO₃-H₂O-CO₂-K₂SO₄, A., 944.
- Bunyea, H., Couch, J. F., and Clawson, A. B., nitrite-thiosulphate combination as a remedy for cyanide poisoning in sheep, A., 247.
- See also Clawson, A. B., and Couch, J. F.
- Bunzell, H. H., Bunzell-Becker moisture-determination apparatus [for foods, etc.], B., 428.
- Buogo, G., rapid micro-determination of phosphoric acid in waters, for sanitary purposes, B., 176. Colorimetric determination of lecithinphosphoric acid in cakes [etc.], containing eggs, B., 250.
- Buraway, A., and Gibson, C. S., tribromogold, A., 459. Organic compounds of gold. IV. *n*-Propyl compounds, A., 479.
- Gibson, C. S., and Holt, S., organic compounds of gold. V. Cyano-compounds: production of alkyl radicals, A., 1112.
- See also Hantzsch, A.
- Burbidge, P. W., action of β - and γ -rays on rock-salt crystals, A., 273.
- Burch, A. B., and Eakin, R. M., device for water circulation, A., 189.
- Burch, O. G., action of steam on glass, B., 901.
- Burchartz, H., and Deiss, E., behaviour of sulphides in [iron] blast-furnace slag in cement mortars and concrete, B., 102.
- Bürk, W. See Sauer, E.
- Burekhalter, R. N., and Osburn, J. M., [air] filter, (P.), B., 1077.
- Burekhardt, E. See Stoll, A.
- Burdette, R. C., derris dusts and oil-lead arsenate spray for squash vine borer (*M. satyriniformis*, Hbn.), B., 778.
- Burdick, E. C. See Dow Chem. Co., and Du Pont de Nemours & Co., E. I.
- Burdick, H. E. See Farlow, M.
- Burdick, H. O., and Pineus, G., effect of cestrin injections on the developing ova of mice and rabbits, A., 1173.
- Burdick, S. D. See Wilkins, T. R.
- Burdon, R. S., adsorption of gases on mercury, A., 818.
- Bureau, J., [solubility] diagram potassium nitrite-water; hydrate KNO₂·0.5H₂O, A., 302. System calcium nitrite-water, A., 1077.
- Bureau, V., distribution of potassium in cells and the changes taking place during stimulation, A., 1017.
- Burés, E., and Barsi, F., condensation of 4-aminotetrazole with carbonyl compounds, A., 1509.
- and Hoffmann, M., nymphaeane, A., 635.
- and Kundera, M., amides of the type of holocaine and derivatives, A., 1490.
- Burge, W. E., and Wickwire, G. C., effect of the performance of physical work on mimosa, A., 1431.
- Burgeff, H., avitaminosis in plants and its elimination by vitamin additions, A., 132.
- Burger, E. E. See Hull, A. W.
- Burger, H. C., and Cittert, P. H. van, fine structure of the mercury line 5461 Å. in absorption, A., 424.
- See also Moll, W. J. H.
- Burgers, J. M., viscosity, A., 22.
- See also Burgers, W. G.
- Burgers, W. G., lattice distortion in nickel-iron, A., 919.
- and Burgers, J. M., plasticity of rock-salt and the Taylor and Becher-Orowan theories of crystalline plasticity, A., 814.
- and Ploos van Amstel, J. J. A., cinematographic record of the $\alpha \rightleftharpoons \gamma$ iron transition, as seen by the electron microscope, A., 1452.
- and Snoek, J. L., rolling and recrystallisation texture of nickel-iron alloys, B., 855.
- See also Dam, W. van.
- Burgess, A. H., effect of the rate of flow of air on assimilation and of fluids on other natural fluids, A., 1178. Manuring of hops, B., 567.
- Burgess, R., natural and acquired resistance of animal hairs to microbiological agencies, B., 141. Use of trypsin for determination of resistance of wool fibres to bacterial disintegration, B., 350. Preservation of wool against harmful insects, B., 449.
- Burgess Laboratories, Inc., C. F. See Kliefoth, M. H., and Schorger, A. W.
- Burget, G. E. See Rohman, E.
- Burgevin, H., action of fertilisers on physical properties of silts, B., 244.
- See also Foex, E.
- Burghelle, J., dibasic cobalt arsenate, A., 461.
- Burghoff, H. L. See Crampton, D. K.
- Burgin, J. See Groll, H. P. A., and Shell Development Co.
- Burgoine, E. See Imperial Chem. Industries.
- Burhop, E. H. S., Auger effect, A., 560.

- Burian, R. See Frenzel, C.
- Burjorjee, H. R., Kamakshi, (Miss), Menon, B. K., and Peacock, D. H., rotatory power and chemical constitution. I. Preparation and resolution of α -benzyl- n -hexoic acid and some derivatives, A., 488.
- Menon, B. K., and Peacock, D. H., rotatory power and chemical constitution. II. Preparation and resolution of β - p -bromophenyl- α -benzylpropionic acid and similar compounds, A., 488.
- Burk, D., and Horner, C. K., hydroxylamine, hydrazine, and amide as intermediate products of nitrogen fixation by *Azotobacter*, A., 787.
- Burk, R. E., significance of the persistence of the crystalline state above the m.p., A., 686.
- See also Mead, F. C., jun., Standard Oil Co., and Thompson, Howard E.
- Burkard, J. See Heide, C. von der.
- Burkart, F., preservation of citrus fruit juices, (P.), B., 252.
- Burke, C. E. See Du Pont de Nemours & Co., E. I.
- Burke, D. J., treatment of mineral sand for separation of one constituent from another, (P.), B., 772.
- Burke, H. E., detection of mineral particles in sputum in silicosis, A., 386.
- Burke, J. P. See Du Pont de Nemours & Co., E. I.
- Burke, S. A. See Martin, L. C.
- Burke, S. P., and Parry, V. F., flow of gas through coal, B., 389.
- See also Doherty Res. Co.
- Burke, T. E. See Tucker, J. M.
- Burkens, J. C. J., sodium fluoride as a blood anticoagulant in blood-phosphorus determinations, A., 509. Clinical determination of phosphorus in blood, A., 880.
- Burkey, L. A. See Frazier, W. C.
- Burkhardt, G. N., effect of substituents on organic reactions: a quantitative relationship, A., 1465.
- Burkholder, C. L., spray materials and spray schedule work, Lafayette [Ind.], 1933, B., 1014.
- Burkser, E. S., Kondoguri, V. V., Kapustin, N. P., and Potapov, P. P., radioactivity of Kuznietzk basin coals, A., 956.
- and Kutschment, M. L., drop reaction for caesium and its use in drop colorimetry, A., 1093.
- and Rutman, A. P., separation of lithium [sulphate] from pseudomene by heating with alkali-metal salts, B., 723.
- Burlakova, H. See Rubinstein, D. L.
- Burlinson, H., preservation of tragacanth mucilage, B., 253.
- See also Brindle, H.
- Burmah Oil Co., Ltd., and Jackson, D. H., apparatus for testing plastic materials, (P.), B., 788.
- Burmistrov, S. See Shilov, E. A.
- Burn, J. H. See Bülbring, E.
- Burnand, W. E., apparatus for electrical heat treatment of [strip] metals, (P.), B., 957.
- Burnet, F. M., antigenic differences between related bacterial strains: criticism of the mosaic hypothesis, A., 1420.
- Burnett, F., and Follett-Smith, R. R., bananas [and soils] in British Guiana, B., 690.
- Burnett, R. E. See Ruhoff, J. R.
- Burns, C. M., and Henderson, N., salts of young bone, A., 377. Mineral constituents of bone. I. Methods of analysis, A., 1396.
- Burns, E. R. See Shepard, M. G.
- Burns, H. S., and Visscher, M. B., influence of various anions of the lyotropic series on the sodium and chloride content of fluid in the intestine, A., 773.
- Burns, J. See Chem. Reactions, Ltd.
- Burns, J. L., classification of α -iron-nitrogen and α -iron-carbon as age-hardening alloys, B., 151. Premature precipitation in supersaturated solid solutions [of metals], B., 153.
- Burns, K. See Hetzler, C. W.
- Burns, R., Jones, D. T., and Ritchie, P. D., pyrolysis. I. Pyrolysis of derivatives of α -acetoxypropionic acid and related substances. II. Pyrolysis of derivatives of α -acetoxyisobutyric acid, and related substances, A., 607, 960.
- See also Imperial Chem. Industries.
- Burns, R. H., antimony compounds extracted from enamel-ware by citric acid solution, B., 545.
- Burns, R. R., and Tennessee Copper Co., ore-drying apparatus, (P.), B., 810.
- Burr, G. O. See Miller, E. S.
- Burr, W. F., and Griggs, V. H., delaying fermentation and putrefaction in perishable organic matter, (P.), B., 44.
- Burrage, L. J. See Baxter, J. P.
- Burrell, R. C., and Walter, E. D., saponin from soya bean, A., 421.
- Burren, F. J. See Cement Marketing Co., Ltd.
- Burridge, L. W. See Bonnell, D. G. R.
- Burriel, F., and Sierra, F., determination of ferrocyanide by means of dichromate; internal indicator method. II., A., 597.
- Burrows, G. H., and King, L. A., jun., free energy change that accompanies hydrogenation of pyridine to piperidine, A., 1462.
- Burrows, G. J., hydroxy-salts of secondary and tertiary arsinates, A., 1138.
- and Parker, R. H., tetravalent compounds of platinum with tertiary arsinates, A., 368.
- Burrows, L. J. See Pearson, H. P.
- Burrows, W., growth-stimulating properties of cystine and tryptophan, A., 408.
- Burrows, W. H., Fritz, J. C., and Titus, H. W., blood-sugar of the fasting, gizzardectomised fowl (*Gallus domesticus*), A., 1001.
- See also Byerly, T. C.
- Burschies, K. See Bauer, Hugo.
- Burstein, A. I., and Frum, F. S., determination of ammonium salts in milk as a method of hygienic examination, B., 874.
- Burstein, R., and Kashtanov, P., activated adsorption of hydrogen on charcoal and its influence on catalytic activity of charcoal, A., 940.
- Burstin, H., refining of lubricating oils by selective extraction, B., 133, 484.
- Burström, D. See Euler, H. von., and Hellström, H.
- Burström, H., determination of cations in beet sugar juice by spectrum analysis, B., 375.
- See also Lundegårdh, H.
- Bursuk, A. J., and Zanko, A. M., potentiometric determination of S^{2-} , CNS^{-} , and Cl^{-} ions in presence of one another, A., 1215, 1336.
- Burt, C. P. See Helferich, B.
- Burtle, J., and Buswell, A. M., comparison of permanganate oxygen demand, biochemical oxygen demand, and direct absorption of oxygen [of sewage], A., 1120.
- Burtner, R. R. See Gilman, H.
- Burton, D., determination of the total sulphur dioxide set free by acid from bleaching [tannin] extracts, B., 739. Determination of acidity of vegetable-tanned leather. II., B., 1008.
- and Bateson, J., degree of accuracy of the glass electrode in alkaline solutions. I., A., 1218.
- Burton, E. F., viscosity of helium I and helium II, A., 438.
- and Oliver, W. F., X-ray diffraction patterns of ice, A., 686.
- Smith, H. Grayson, and Tarr, F. G. A., completely superconducting galvanometer, A., 839.
- Tarr, F. G. A., and Wilhelm, J. O., thermo-electric effect and the superconducting state, A., 1062.
- Wilhelm, J. O., and Misener, A. D., superconductivity of thin films, A., 154.
- See also McLennan, J. C.
- Burton, H., alkaline hydrolysis of the azlactones derived from *o*-nitrobenzaldehydes, A., 1385.
- and Shoppee, C. W., anionotropic and prototropic changes in cyclic systems. V. System derived from 1-hydroxy-indene, A., 1233.
- Burton-Dixie Corporation. See Bowersox, J. W.
- Burton Explosives, Inc. See Fox, A. S.
- Burwell, A. W., and Alox Chem. Corp., insecticidal, fungicidal, and bactericidal compositions, (P.), B., 200. Rubber-vulcanisation assistant, (P.), B., 1006.
- Burwell, E., jun. See Eastman Kodak Co.
- Burwell, J. T. See Warren, B. E.
- Burwell, R. L., jun. See Eastman Kodak Co.
- Bury, C. R., and Owens, R. D. J., system butyric acid-sodium hydroxide-water, A., 303.
- and Parry, G. A., densities of aqueous solutions of potassium acetate and *n*-dodecanoate, A., 817.
- Busch, A., burning of cement slurry, (P.), B., 632.
- Busch, G., and Scherrer, P., new substance with the electrical properties of Rochelle salt, A., 1452.
- Buschke, W. See Goldmann, H.
- Buschman, K. A. See Trefiliev, I. A.
- Buschmann, E., bending-tensile test, B., 230.
- Buscke, W. See Leonhardt, A.
- Buser, K., manipulation of oil-soluble synthetic resins of high phenol content, B., 277. Synthetic drying oils, B., 463. Use of semi-drying oils in nitrocellulose lacquers, B., 510. Adhesion of paint materials, B., 1055. Technique of using Brazil juthaica resin, B., 1103.
- Bushby, R., detergents; [toilet soaps], (P.), B., 641.
- Bushnell, J., injury to potatoes from improper placement of fertiliser, B., 245. Sensitivity of the potato plant to soil aeration, B., 646.
- Buskirk, H. H. See Fabian, F. W.
- Busnita, T., and Gavrilescu, N., depigmentation of eggs of *Cyprinus carpio*, A., 162

- Busquet, H., and Vischniac, C., vasodilating action of quinine; cardiovascular effects of quinine phenylethylbarbiturate, A., 1018. Influence of viscosity of blood on the depressor action of yohimbine, A., 1274.
- Buss, J., disintegration of fusible solids, (P.), B., 1074.
- Buss, O. F., Singleton, J. D., Dings, L. M., Munz, T. E., and Allis-Chalmers Manufg. Co., production of colloidal material and treatment of boiler feed-water, etc., (P.), B., 2.
- Buss, W. See Fuchs, H. J.
- Busse, W. F., tear-resistance and structure of rubber, B., 369.
- Bussemaker, B. B. See Ruggli, P.
- Bussmann, G. See Schmalfluss, H.
- Buston, H. W., nature, distribution, and development of cell-wall constituents of plants, A., 421.
- Bustos, C. E. See Nordenflycht, L.
- Buswell, A. M. See Burtle, J., and Tarvin, D.
- Buszlin, A. See Waelsch, H.
- Buszczynski, B., influence of excessive quantities of fertilisers on composition of sugar beets, B., 868.
- Butcher, C. H., notes for users of chemical plant; care and maintenance of various items of equipment, B., I. Industrial microscopy. VI. Oils, fats, waxes, resins, and asphalts, B., 129. Microscopy of food products. VI. Sugar and honey. VII. Jam, marmalade, and ice cream. VIII. Milk, cheese, and suet, and vegetable powders, B., 169, 378, 521.
- Butenandt, A., and Cöbler, H., androsterone. IV. Degradation of stigmasterol to isoandrosterone and androstenedione; relationship between hormone of the corpus luteum, *allopregnanolone*, and androsterone, A., 1033.
- and Dannenbaum, H., androsterone. III. Isolation of a physiologically inactive sterol derivative from men's urine, its relation to dehydroandrosterone and androsterone; constitution of androsterone, A., 413.
- and Hanisch, G., transformation of dehydroandrosterone into Δ^4 -androsten-17-ol-3-one (testosterone); method of preparing testosterone from cholesterol, A., 1370.
- and Mamoli, L., *allopregnan-3-ol-20-one*, a companion of the corpus luteum hormone, A., 215. Bromination of 3-ketobisnorcholanic acid and 3-ketohisnorallocholic acid; Δ^4 -3-ketobisnorcholanic acid and Δ^4 -3-ketobisnorallocholic acid, A., 1364. Isomeric *allopregnan-3-ol-20-one*, A., 1370. Δ^1 -*allopregnen-3:20-dione*; specificity of the corpus luteum action, A., 1370.
- and Schmidt, Josef, *pregnan-20-ol-3-one*, A., 215. Conversion of pregnandiol into the corpus luteum hormone, A., 216. Polymorphous modifications of the corpus luteum hormone, A., 260. Δ^4 -*Pregnen-20-ol-3-one*; specificity of corpus luteum activity, A., 346.
- and Tscherning, K., androsterone. I. Isolation from men's urine. II. Chemical characterisation. V. Androstenediol, a physiologically active reduction product of androsterone, A., 413, 1033.
- Butenandt, A., and Westphal, U., preparation of the corpus luteum hormone from stigmasterol; constitution of the corpus luteum hormone, A., 260.
- See also Allen, W. M.
- Butescu, E. See Slătineanu, A.
- Butkevitch, V. S., determination of available phosphate and potassium in soils by means of *Aspergillus oryzae*, B., 1108.
- and Timofeeva, A. G., effect of mineral constituents in the medium on acid production by *Aspergillus niger*, A., 406.
- Butkov, K. V., effect of light on stannous chloride vapour, A., 562.
- See also Boitzova, Z. V.
- Butler, A. M., Blatt, H., and Southgate, H., solubility of plasma-proteins. II. Dependence on pH , temperature, and lipid content in concentrated solutions of potassium phosphate; fractional precipitation of the proteins, A., 879.
- See also Gamble, J. L., and Kerpel-Fronius, E.
- Butler, C. L., and Cretcher, L. H., cinchona alkaloids in pneumonia. III. *apocupreines*, (*apoquinine*), A., 996.
- Nelson, William L., Renfrew, (Miss) A. G., and Cretcher, L. H., cinchona alkaloids in pneumonia. I. Miscellaneous alkaloids and some hydrocupreine ethers, A., 636.
- Butler, C. P., and Stratton, F. J. M., aluminium coating of gratings, A., 57.
- Butler, J. A. F., and Ramchandani, C. N., solubility of non-electrolytes. II. Influence of polar group on free energy of hydration of aliphatic compounds, A., 1067.
- Ramchandani, C. N., and Thomson, D. W., solubility of non-electrolytes. I. Free energy of hydration of aliphatic alcohols, A., 441.
- See also Armstrong, G., Connell, L. C., and Orr, W. J. C.
- Butler, M. R., nitrogen of polysaccharide complex from *Chondrus crispus*, A., 797.
- Butler, O., and Bissey, R., effect on growth of oats of copper sprays used for control of mustard, B., 167.
- See also Bissey, R.
- Butler, R. C., Hughes, J. M., and Carter, J. H., [tuyère for] blast furnaces, (P.), B., 955.
- Butler, R. S. See Newton, H. W.
- Butler Manufacturing Co. See Norquist, V. C.
- Butom, M. L. See Eidelman, M. M.
- Butsch, W. L., glucose tolerance and glycogen storage capacity of the dog, A., 111.
- Butterfield, C. T. See Hoskins, J. K.
- Buttermann, H. H. See Rodrian, R.
- Butterworth, B., correlation of laboratory tests with weathering properties of bricks. I. Scope of the investigation and description of ground-exposure test, B., 188.
- See also Watkins, C. M.
- Butterworth, C. E., water problems in sulphur mining, B., 628.
- Butterworth, F. W., Cline, I. R., and Western Brick Co., burning of argillaceous material, (P.), B., 356.
- Doughty, I. N., Cline, I. R., and Western Brick Co., expansive burning of clays, (P.), B., 356. Expansively burned ceramic material, (P.), B., 356.
- Butts, D. C. See Hercules Powder Co.
- Butts, D. C. A. See Moerk, F. N.
- Butts, J. S., Cutler, C. H., Hallman, L., Deuel, H. J., jun., and Blunden, H., ketosis. VI. Quantitative studies on β -oxidation, A., 891.
- Butz, L. W., dehydrocineoles. I. Preparation of 5-methyl-2-isopropylfuran and its condensation with maleic anhydride, A., 1245.
- and LaLande, W. A., jun., anthelmintics. I. Effect of hydrogen peroxide and some oxygenated terpene hydrocarbons on *Ascaris lumbricoides*, A., 246.
- Buxbaum, E. C. See Du Pont de Nemours & Co., E. I.
- Buylla, B. A. See Rosario, M.
- Buzzo, A., and Carratala, R. E., poisoning by barbituric acid derivatives, A., 656.
- and Gandolfo, C. F., poisoning by thallium acetate, A., 1021.
- Byall, S. See Ambler, J. A., and Keane, J. C.
- Byšichin, and Láška, photocolometric determination of carbon dioxide in air, B., 976.
- Byczkowski, A. See Terlikowski, F.
- Byer, H. E., countercurrent condenser, (P.), B., 1027.
- Byerly, T. C., Burrows, W. H., and Titus, H. W., testis-stimulating potency of frozen turkey pituitaries injected subcutaneously into young male chicks, A., 1544.
- Byers, H. G., selenium occurrence in certain soils in the United States, with a discussion of related topics, B., 1010.
- and Knight, H. G., selenium in soils in relation to its presence in vegetation, B., 917.
- See also Dudley, H. C., Middleton, H. E., Robinson, W. O., Scott, Winfield, and Slater, G. S.
- Byers, J. M., and Swavelly, D. T., grinding mill, (P.), B., 1074.
- Byler, W. H., and Krueger, A. C., photoelectric cell in the study of phosphorescence, A., 952.
- Byrkit, R. J., jun. See Hercules Powder Co.
- Byrne, J. F. See Myers, F. E.
- Byrne, L. J. P. See Levy, L.
- Byrnes, C. P. See James, J. H.
- Byrns, A. C., and Rollefson, G. K., photochemistry of mixtures of chlorine and ozone, A., 47.
- Byron, C. S. See Wishnoffsky, M.
- Byron, F. B., effect of a diet of pure glucose on the fluid balance of the body, A., 1404.
- Byron, T. H., and North Amer. Rayon Corp., [dull-lustre] artificial filaments, (P.), B., 668.
- Bywater, W. G. See Gilman, H.

C.

- Cabannes, J., luminescence of the upper atmosphere, A., 59. Radiation of the night sky between 5000 and 8000 Å., A., 272. Red rays of oxygen in the spectrum of the night sky, A., 1046.
- and Dufay, J., Vegard-Kaplan bands in the spectrum of the night sky, A., 800.
- Caberti, L., indigosol dyes: reserves obtained with compounds of naphthol AS on bases foularded with indigosol, B., 302.

- Caberti, *L.*, foulard and reserve dyeing with indigosol-O, B., 625. Applications of indigosol dyes, B., 800. Khaki dyeing, B., 800.
- Cabito, *A.*, variations in blood-calcium fraction caused by parathyroid hormone, A., 258.
- Cabot, Inc., *G. L.* See Billings, *E.*
- Cabrera, *B.*, and Fahlenbrach, *H.*, paramagnetism in the palladium series, A., 239. Magnetic susceptibility of water and the influence of dissolved salts, A., 923. Diamagnetism of heavy water in the liquid and solid states, A., 923. Diamagnetism of primary alcohols and other organic compounds, A., 923.
- Cadbury, *W. E., jun.*, b.p. of the constant-boiling mixture $\text{HCl-H}_2\text{O}$, A., 1067.
- Cadbury, *W. W.*, and Yan, *T. T.*, blood-calcium in southern Chinese, A., 1393.
- Caddick, *A. J.*, agglomeration, binding, and sintering process, (P.), B., 637.
- Cade, *A. R.*, and Halvorson, *H. O.*, germicidal detergents. I. and II. Synergistic action of soaps on germicidal efficiency of alkalis, B., 976.
- Cade, *G. N., jun.* See Porter, *L. E.*
- Cadle, *R.* See Damerell, *V. R.*
- Cado, *Y.* See Lévy-Bruhl, *M.*
- Cadot, *H. M.* See Hitchcock, *L. B.*
- Cadwell, *S. M.*, and Morgan & Wright, abrasion-resisting rubber stocks, (P.), B., 1155.
- and U.S. Rubber Co., vulcanising of rubber, (P.), B., 1104.
- Cady, *George H.*, NO_2F , an explosive compound, A., 181. Reaction of fluorine with water and with hydroxides, A., 461.
- Cady, *Gilbert H.* See Ball, *C. G.*
- Cady, *L. C.*, and Williams, *J. W.*, molecular diffusion into wood, B., 408.
- Caesar, *K. G.* See Jores, *A.*
- Cafferata, *B. J.*, Cafferata, *G. W.*, and Cafferata & Co., Ltd., preparation of plaster mixtures for production of moulds, (P.), B., 727.
- Cafferata, *G. W.* See Cafferata, *B. J.*
- Cafferata & Co., Ltd. See Cafferata, *B. J.*
- Cagle, *W. C.*, Tarbuton, *G.*, and Vosburgh, *W. C.*, system cadmium sulphate-acetic acid-water at 25°, A., 36.
- and Vosburgh, *W. C.*, system cadmium acetate-acetic acid-water at 25°, A., 583.
- Caglioti, *V.* See Parravano, *N.*
- Cagnasso, *A.* See Cambi, *L.*
- Cahane, *M.* See Parhon, *C. I.*
- Cahill, *G. F.* See Brand, *E.*
- Cahill, *W.* See Neuberg, *C.*
- Cahn, *F. J.*, citric acid fermentation on solid materials, B., 424.
- Cahn, *R. S.*, and Boam, *J. J.*, determination of rotonono in derris root and resin, B., 380. Constituents of derris resin, B., 381.
- See also Mercer, *D.*
- Cahn, *T.*, chemical changes accompanying muscle contraction and fever. IV. Changes in composition of muscle, blood, and liver in fever, A., 117.
- and Houget, *J.*, chemical changes accompanying muscle contraction and fever. V. Muscle metabolism unit and hypotheses on carbohydrate breakdown in muscle, A., 117. Transport of lipins in the animal organism, A., 1151.
- Cahoon, *N. C.*, influence of p_{H} on the potential of African manganese dioxide, A., 1325.
- Caillère, (*Mlle.*) *S.*, dehydration of fibrous paraspionite, A., 323. Incandescence phenomena shown by certain antigorites, A., 601. Bowlingito, A., 843.
- Caillie, *R. van*, geometrical isomerides of undecnonitrile, A., 1357.
- Cain, *J. R.*, electrolytic regeneration of [ferrous sulphate] pickle liquor, (P.), B., 682.
- and Eustis, *F. A.*, ductile electrolytic iron, (P.), B., 234.
- Cajander, *H.* See Willberg, *B.*
- Cajori, *F. A.*, lactase activity of intestinal mucosa of dog and some characteristics of intestinal lactase, A., 783.
- Cal-Aspirin Co. See Wodlinger, *M. H.*
- Calatroni, *C. J.*, development of tolerance by the ovary to prolonged action of folliculin, A., 128.
- Calbeck, *J. H.*, recovery of metal values from lead-bearing materials [e.g., battery scrap], (P.), B., 1000.
- Calbick, *C. J.*, and Davison, *C. J.*, electron microscope, A., 1341.
- Calcagni, *G.*, inorganic photosyntheses, A., 1331.
- Calcagno, *O.* See Roffo, *A. II.*
- Calcar, *R. P. van*, biology of carbohydrate metabolism, A., 1408.
- Calcott, *W. S.*, Lee, *I. E.*, and Gasoline Antioxidant Co., gum inhibitor for [liquid] hydrocarbon fuels, (P.), B., 759.
- Walker, *H. W.*, and Gasoline Antioxidant Co., gum inhibitor [for petroleum], (P.), B., 713.
- See also Du Pont de Nemours & Co., *E. I.*
- Calderone, *F. A.*, ether dosage after pre-anæsthetic medication with narcotics (barbiturates, magnesium sulphate, and morphine), A., 1410.
- See also Friedman, *M. M.*
- Caldwell, *H. B.* See Conell, *G. A.*
- Caldwell, *J.*, physiology of virus diseases in plants. VII. Purification of the virus of yellow mosaic of tomato, B., 691.
- See also Havas, *L.*
- Caldwell, *J. M.*, and Weeks, *M. E.*, Victoria-blue BX as internal indicator in ceriometry, A., 1339.
- Caldwell, *J. R.*, iodometric determination of copper, A., 318. Hot-water funnel, A., 321. Surface energy experiment, A., 1316.
- and Moyer, *H. V.*, determination of chloride; modification of the Volhard method, A., 316.
- Caldwell, *J. S.* See Culpepper, *C. W.*
- Caldwell, *L.*, and California First Nat. Bank of Long Beach, neutralisation [of acid-treated oil], (P.), B., 10. Neutralisation [of acid-treated hydrocarbon oils], (P.) B., 89.
- Caldwell, *M. L.*, and Doebbeling, *S. E.*, concentration and properties of two amylases of barley-malt, A., 1278.
- and Hildebrand, *F. C.*, direct and quantitative study of amylolytic activity of amylases, A., 1536.
- Caldwell, *W. L.*, porous concrete, (P.), B., 24.
- Caley, *E. R.*, detection of calcium in presence of strontium and barium, A., 54. Deposition of metallic copper on antique silver coins during electrolytic cleaning and a method for its removal, B., 1050.
- Calfee, *R. K.* See McHargue, *J. S.*
- Calico Printers' Association, Ltd., Lantz, *L. A.*, and Morrison, *A. L.*, glazing, embossing, and finishing of textile fabrics, (P.), B., 542. Fixation of dyes on textile fabrics, (P.), B., 1140.
- California First National Bank of Long Beach. See Caldwell, *L.*, and Howes, *R. T.*
- California Fruit Growers' Exchange. See Finley, *J. A.*, and Wilson, *C. W.*
- California Prune & Apricot Growers' Association. See Pape, *C. B.*
- Calingaert, *G.*, and Flood, *D. T.*, isomerisation of *n*-heptane, A., 843.
- Calkin, *J. B.*, microscopical examination of paper, B., 143.
- See also Bancroft, *W. D.*
- Callahan, *T. F.*, apparatus for semi-fluid and fluid evacuation [and transport], (P.), B., 611.
- Callan, *T.* See Imperial Chem. Industries.
- Callaway, *R. W.* See Tuchfarber, *F.*
- Callebaut, *C.*, and De Blicquy, *J.*, dyeing of bobbins of cotton slubbings and rovings, (P.), B., 145.
- Callery, *L. E. d'A.*, explosive, (P.), B., 207.
- Callis, *C. C.* See Aluminum Co. of America.
- Callis, *G. T.* See Brit. Non-Ferrous Metals Res. Assoc.
- Callow, *E. H.*, carcass quality of the pig in relation to growth and diet, B., 781.
- Callow, *R. K.*, and Deanesly, *R.*, effect of androsterone and of male hormone concentrates on the accessory reproductive organs of castrated rats, mice, and guinea-pigs, A., 1033. Biological activity of derivatives of the male hormone androsterone, A., 1174.
- and Parkes, *A. S.*, growth and maintenance of the fowl's comb by administration of androsterone, A., 1033.
- See also Greenwood, *A. W.*, and Rowlands, *J. W.*
- Calloway, *N. O.*, Gilman, *H.*, and Werkman, *C. H.*, germicidal action of α -alkylated furoic acids, B., 1024.
- See also Gilman, *H.*
- Calloy, Ltd. See Kirsebom, *G. N.*
- Calò, *A.*, phospho-organic compounds in products obtained on grinding germinated barley, B., 746.
- Calverley, *J. E.* See Brassert & Co., Ltd., *H. A.*
- Calvert, *C. K.*, and Bloodgood, *D. E.*, operation experiments at Indianapolis activated sludge plant, B., 208.
- Calvery, *H. O.*, type II *Pneumococcus* specific precipitate, A., 1420.
- and Freyburg, *R. H.*, [composition of] Bence-Jones protein, A., 886.
- Calvet, *E.*, and Calvet, (*Mme.*) *E.*, variation of the velocity coefficient of the saponification of amides by sodium carbonate in saturated solutions, A., 173.
- Calvet, (*Mme.*) *E.* See Calvet, *E.*
- Calvet, *F.*, and Seijo, *E.*, nitration of 2:2'-dihydroxydiphenyl, A., 615. 1:3-Dioxins. IV. Condensation of 3:3', 3:5', and 5:5'-dinitro-2:2'-dihydroxydiphenyl with formaldehyde, A., 627.
- Calvet, *J.*, annealing of pure aluminium and its possible use as a criterion of purity, B., 312.
- Trillat, *J. J.*, and Paié, *M.*, recrystallisation of pure aluminium, A., 1194.
- Calvin, *D. B.* See Weinbach, *A. P.*
- Cambi, *L.*, and Cagnasso, *A.*, magnetic susceptibility of the ferrous salts of pyridine- and quinoline-2-carboxylic acids, A., 149.

- Cambi, L., Cagnasso, A., and Tremolada, E., nickel cyanide and complex derivatives: magneto-chemical studies, A., 149.
- and Szegő, L., magnetic susceptibility and structure of hœmin, A., 573.
- and Tremolada, E., cobalt, nickel, and copper complexes of the amides and imides: magneto-chemical studies, A., 923.
- Cambier, P. See Govaerts, P.
- Camblin, C. See Ramsey, J. C.
- Cambron, A., and Bayley, C. H., thermal treatment of gases and vapours, (P.), B., 482.
- Cameron, A. B. See Thomas, W. H.
- Cameron, A. E., and Reyerson, L. H., sorption of bromine and iodine by silica gel, A., 696.
- and Taylor, A. M., photophysical changes in silver-silver chloride systems, A., 1211.
- See also Reyerson, L. H.
- Cameron, C. See Williams, C. H. B.
- Cameron, D., α -tracks in presence of strong γ -radiation, A., 802.
- Cameron, D. H. See McLaughlin, G. D.
- Cameron, E. J., Yesair, J., and Williams, C. C., heat-resistance [of bacteria], B., 521.
- Cameron, F. K. See Baskerville, W. H., and Clifford, A. T.
- Cameron, G. M. See Dean, D. K.
- Cameron, L. T., and Marshall, C. O., jun., condenser for hydrocarbons, (P.), B., 1035.
- Cameron, P. See Sullivan, M.
- Cameron, S. H., and Appleman, D., distribution of total nitrogen in the orange tree, A., 552.
- Cameron, W. H. B. See Elliott, A.
- Camiglieri, W. See Jolles, Z. E.
- Caminha, A., jun., handling [sugar] juices of POJ 2878 [in the factory], B., 1014.
- Cammen, L., and Davie, P., oil-purifying apparatus, (P.), B., 11. Surface-tension dialysing element and its construction, (P.), B., 387. Surface-tension dialysis [of lubricating oil], (P.), B., 617.
- See also Davie, P.
- Camp, A. F., citrus-fruit juices, B., 122. Preservation of citrus juices and pulps, B., 427. Zinc sulphate as a soil amendment in citrus groves, B., 1011.
- See also Blackmon, G. H., and Mowry, H.
- Camp, G. van, kinochromatins, A., 376. Function of an enzyme, endosomase, in cell division, A., 660.
- Camp, H. W., and Empire Oil Refining Co., refining of [lubricating] oil, (P.), B., 892.
- Camp, J. P. See Bryan, O. C., and Leukel, W. A.
- Camp, T. R., porous plates for use in filter-bottoms for rapid filters [for water], B., 527.
- Campanacci, D., action of sulphur on gaseous metabolism in man, A., 531.
- Campbell, A. J. R. See Campbell, A. N.
- Campbell, A. N., and Campbell, A. J. R., thermodynamics of binary liquid mixtures: formic acid and water, A., 24. Allotropy of phosphoric oxide, A., 1470.
- and Cook, E. J. R., precipitation from supersaturated solutions of strontium sulphate, A., 577.
- Downes, K. W., and Samis, C. S., system $MgCl_2$ - KCl - $MgSO_4$ - K_2SO_4 - H_2O at 100°, A., 163.
- Campbell, A. W., and Goodrich Co., B. F., aromatic amines, (P.), B., 93.
- Campbell, C. D. See Walters, A. C.
- Campbell, C. G. See Carl, B. E.
- Campbell, C. L., and Badger & Sons Co., E. B., hydrolysis of halogen derivatives of hydrocarbons, (P.), B., 138.
- Campbell, C. Q. M., preparation of sols for clarifying liquids, (P.), B., 100.
- Campbell, E. G. See Hecht, M.
- Campbell, E. M. See Macdonald, P. A.
- Campbell, E. R., and Impermeable Products, Ltd., coating [paper] surfaces [for moisture-proofing], (P.), B., 185. Coating of [paper, etc.] surfaces, (P.), B., 278.
- Campbell, F. L., Sullivan, W. N., Smith, L. E., and Haller, H. L., insecticidal tests of synthetic organic compounds, chiefly tests of sulphur compounds, against culicinemosquito larva, B., 335.
- See also Jones, H. A.
- Campbell, H. C., and Rice, O. K., explosion of ethyl azide, A., 938.
- Campbell, H. Louise, Bessey, O. A., and Sherman, H. C., adult rats of low calcium content, A., 1274.
- See also Sherman, H. C.
- Campbell, Harry L., calculation of metal charges for the foundry cupola, B., 633.
- Campbell, James, non-protein nitrogenous constituents of fish and lobster muscle, A., 1397.
- Campbell, John, Rolleston, L. O., and Internat. Paper Co., bleaching of fibrous cellulose, (P.), B., 224.
- See also Kraft, Ltd., G.
- Campbell, (Sir) John, Macnaughtan, D. J., and Tait, W. H., colouring of tin and tin alloys and articles made therefrom, applicable also to protecting same against corrosion, (P.), B., 156.
- Campbell, J. A., reproduction and cancer, A., 515.
- and Taylor, H. J., micro-method of gas analysis, A., 1552.
- Campbell, J. G. See Robertson, F. R.
- Campbell, J. M., Signaigo, F. K., Lovell, W. G., and Boyd, T. A., antiknock effect of lead tetraethyl, B., 614.
- See also Lovell, W. G.
- Campbell, M., respiratory exchange during exercise in heart disease. III., A., 383.
- Wolfe, J. M., and Phelps, D., effect of feeding thyroid on anterior pituitary of the female albino rat, A., 412.
- Campbell, N., and Cooper, R. C., indole series. I. Derivatives of 2-phenyl-indole, A., 1250.
- Campbell, N. R. See Barnett, E. de B.
- Campbell, S. E., refining [crude petroleum] oil, (P.), B., 89.
- Campbell, W. B., structure of [cellulose] fibre and its influence in the making of paper, B., 399. Decolorising of oils, (P.), B., 1127.
- Campbell, W. G., starch and related polysaccharides of certain hardwoods. I. Preparation and properties of oak and walnut starch, A., 797. Wood hemicelluloses, A., 1435. Chemical aspect of timber research, B., 308. Wood preservation, B., 497.
- Taylor, K. F., and Bryant, S. A., action of calcium salts on wood with special reference to the "inorganic infiltration" theory of decay, B., 456.
- and Wiertelak, J., chemistry of white rots of wood. IV. Effect on wood substance of *Ustilina vulgaris*, Tul., A., 1043.
- Campen, P. van, composition and properties of clay, B., 61.
- Campo, J. H., storage-temperature requirements of the chico, *Achras zapota*, Linn., B., 1162.
- Campora, C. See Fleury, P.
- Campsie, H. G., synthesis of vitamin-D, (P.), B., 972.
- Canac, F., topography of surfaces deduced from coefficient of diffusion of light; application in study of corrosion, A., 147. Study of intercrystalline corrosion by the light-diffusion method, B., 997.
- Canada, Department of Mines, investigations in ore dressing and metallurgy, B., 312.
- Canadian Industries, Ltd. See Johnson, E. J.
- Canadian International Paper Co. See Hochberger, E.
- Canal, H. See Goris, A.
- Canals, E., and Flous, (Mlle.) E., surface-tension of edible and medicinal oils, B., 1022.
- Perrottet, (Mlle.) S., and Peyrot, P., fluorescence of quinine salts, A., 505.
- Peyrot, P., and Noël, R., fluorescence of some pure substances, A., 1054.
- Căndea, C., and Kühn, I., reduction of zinc oxide with natural gas, A., 592.
- and Macovski, E., 2-nitrofluorene, A., 1488.
- and Murgulescu, I. G., conductometric titration of molybdate with silver nitrate, A., 1474. Action of methane in Rumanian natural gas on calcium chloride, B., 534.
- Candee, E. T. See Hibbard, W. R.
- Cannavò, L., and Beninato, R., effect of intensive X-ray irradiation of the pituitary on blood-magnesium and magnesium exchange, A., 543.
- Cannegieter, D., Höppler viscosimeter in connexion with the standardisation of viscosity measurements, A., 1098.
- See also Smits, A.
- Canneri, G., alloys of praseodymium and copper, A., 1456.
- and Magini, P., rotenone and household insecticides, B., 1167.
- and Salani, R., composition of Italian honeys, B., 1116.
- Canning, G. See Houston, J.
- Cannon, C. Y., and Espe, D. L., influence of physical properties of milk on its rate of digestion *in vivo*, A., 379 1398.
- Schulz, J. A., and Espe, D. L., relation of blood-calcium and -phosphorus in sterility of dairy animals, A., 1403.
- See also Espe, D. L., Mortenson, F. N., and Thomas, B. H.
- Cannon, H. H., and Cannon-Prutzman Treating Processes, Ltd., sweetening of petroleum products, (P.), B., 983.
- Cannon, P. D. See Johns-Manville Corp.
- Cannon, W. A., and Purer, E. A., removal of oxygen from water by cut branches, A., 549.
- Cannon-Prutzman Treating Processes, Ltd. See Cannon, H. H.
- Cantarow, A., hepatic function. II. In portal cirrhosis and congestive heart failure, A., 1526.
- Canter, O. R., and Industrial Patents Corp., curing of hides and skins, (P.), B., 739.

- Cantieni, R., decomposition of fructose by ultra-violet light in non-aqueous solution (methyl alcohol), A., 68. Decomposition of fructose in quartz light in presence of pyridine; determination of pyridine in very dilute solution, A., 68. Ultra-violet absorption of pyridine, measured with the help of decomposition of fructose in ultra-violet light; general method for determining ultra-violet absorption of pure liquids and solutions, A., 428. Ultra-violet photolysis of fructose in pure and aqueous glycerol, A., 713. Decomposition of fructose in glass vessels by ultra-violet light of wave-length 366 m μ from the quartz-mercury vapour lamp, A., 1109. Yellow coloration of mixtures of fructose and pyridine by ultra-violet light, A., 1130.
- Cantoni, O., micro-determination of acetone in blood, A., 104. Micro-method for determination of the individual or total ketonic substances in blood, A., 880. Micro-determination of ketones in urine, A., 1268.
- Cantor, T. See Elöd, E.
- Canzanelli, A., Guild, R., and Harington, C. R., ketonic acid analogues with thyroxine, A., 976.
- Guild, R., and Rapport, D., use of ethyl alcohol as a fuel in muscular exercise, A., 777.
- Segal, M., and Rapport, D., utilisation of the calorogenic action of di-iodo-thyronine and thyroxine in muscular exercise, A., 777.
- See also Biguria, F., and Zimmermann, W.
- Capatos, L. See Karantassis, T.
- Capel, W. H. See De Haas, W. J.
- Capello, C. F., camphor as cryoscopic solvent and mol. wt. determination by Rast's method, A., 1476.
- Capen, R. G. See Bailey, L. H.
- Capesius, V. See Dafert, O.
- Capizzi, I. See Fiandaca, S.
- Caplan, M. C., failure of a gold fuse in contact with nickel-chromium alloy, B., 953.
- See also Gen. Electric Co.
- Capo, B. G., 18-3-6 mixture as fertiliser for [sugar] cane, B., 199.
- Caprio, A. F., and Celluloid Corp., tempering of cellulose acetate plastics, (P.), B., 961. Cementing of [cellulose-derivative] foil and thin film, (P.), B., 987.
- Capstaff, J. G. See Eastman Kodak Co.
- Capuani, G., calcium in tuberculosis, A., 651.
- Carba Dry Ice (Australia), Ltd., preservation of perishable substances [e.g., meat] during transport or storage, (P.), B., 1067.
- Carbery, M., annual report of the agricultural chemist, Bengal, 1933, B., 244.
- Carbie, Ltd., and Them, H., carbide cakes, (P.), B., 226.
- Carbide & Carbon Chemicals Corporation, and Carruthers, T. F., dialkyl sulphates, (P.), B., 13. Acetylbenzoyl peroxide, (P.), B., 1131.
- and Cox, H. L., dialkyl sulphates, (P.), B., 13. Preservation of glycol ethers, (P.), B., 487.
- and Davidson, J. G., alkylbenzenes, (P.), B., 140.
- and Davies, J. A., alcohols from olefines, (P.), B., 395.
- Eastman Kodak Co., and Branchen, L. E., recovery process [for cellulose esters], (P.), B., 350.
- Carbide & Carbon Chemicals Corporation, Eastman Kodak Co., Fordyce, C. R., and Robertson, H. F., moistureproof materials and compositions therefor, (P.), B., 304.
- and Fife, H. R., purification of gases, (P.), B., 1077.
- and Greer, P. S., drying [of ethyl ether], (P.), B., 761.
- and Harvey, N. D., jun., unhairing bath and process for treating hides, (P.), B., 864. Cosmetic preparation, (P.), B., 924.
- and Law, G. H., acetoacetanilide, (P.), B., 761.
- and Perkins, G. A., vinyl esters, (P.), B., 56. Separation of acid gases [e.g., sulphur dioxide from flue gases], (P.), B., 452. Olefines, (P.), B., 938.
- Perkins, G. A., and Toussaint, W. J., vinylacetylene, (P.), B., 714.
- and Reid, E. W., [cellulose acetate] composition, (P.), B., 599.
- and Robertson, H. F., filaments, films, etc., from vinyl resins, (P.), B., 18.
- and Toussaint, W. J., hydrogenation of [α -jethyl- $[\beta]$ -propyl-acrolein]-acetaldehyde], (P.), B., 585.
- and Wickert, J. N., esters of 2-ethylbutanol-1 [β -ethylbutyl alcohol], (P.), B., 262, 715. Hydroxyalkylamines, (P.), B., 1130.
- and Wilson, A. L., thiosulphate salts, (P.), B., 672.
- and Young, C. O., *n*-butanol [butyl alcohol], (P.), B., 395. Purification of [mixed] liquids, (P.), B., 532. Manufacture of acetaldehyde and a catalyst therefor, (P.), B., 894.
- Young, C. O., and Law, G. H., *n*-propyl alcohol, (P.), B., 138.
- Young, C. O., and Perkins, G. A., separation of hydrocarbons, (P.), B., 12.
- Carbon Products Co., Inc. See Wood, C. B.
- Carbondale Machine Co. See Hiller, N. H.
- Carboneri, B. G., chemical equilibria in homogeneous systems, and the validity of the Le Chatelier principle, A., 301.
- Carboneschi, C. L. See Carratalá, R. E.
- Carbonic Development Corporation, solid carbon dioxide, (P.), B., 227.
- Carbo-Oxygen Co. See Eichelman, F. J.
- Carborundum Co., bonded abrasive articles, (P.), B., 228. Flexible abrasive coated articles, (P.), B., 993. Materials and articles for use in polishing operations, (P.), B., 993.
- See also Benner, R. C., Martin, H. C., Nelson, C. S., and Power, H. R.
- Carborundum Co., Ltd., silicon carbide refractories and products thereof, (P.), B., 61. Packing for fractionating columns, (P.), B., 754. Bonded abrasive articles, (P.), B., 805.
- and Nobes, F. L., ceramically bonded abrasive articles, (P.), B., 455.
- Carburetted Gas, Inc., fuel gas from hydrocarbon oils and steam, (P.), B., 88. Gas from oil, (P.), B., 213. Continuous generation of fixed gas from oil, (P.), B., 537.
- See also Nagel, T.
- Carcamo, V., waters of L. Boza, A., 60.
- Carceller, J. See Briner, E.
- Card, S. T. See Pemberton, E. S.
- Cardon, R. See Hoffman, W. S.
- Cardoso, D. M., diphtheria toxin and vitamin-C, A., 1036.
- Cardox (Gt. Britain), Ltd. See Turner, E. P.
- Cardwell, A. B., thermionic properties of tantalum, A., 801.
- Carew, W. H., perspiration and erythema, A., 1268.
- Carey, C. L. See Waksman, S. A.
- Carey, H. N., and Hunt, H. M., chemistry of cataract in the diabetic, A., 1269.
- Carey, J. S., applications of distillation in modern petroleum refining, B., 757.
- Carey, M. K. See Darrow, D. C.
- Carey, W. F. See Imperial Chem. Industries.
- Caridroit, F., comparison between effects of ovarian transplants and of folliculin benzoate on the comb and spur of the capon, A., 666.
- Carisi, U., keeping properties of ferric chloride solutions for reagent purposes, A., 314.
- Carl, B. E., Austin, W. S., and Aluminum Chloride Oil Refining Corp., apparatus for recovery of aluminium chloride from the residue of aluminium chloride oil refining, (P.), B., 21.
- and Campbell, C. G., apparatus for refining mineral oil by aluminium chloride, (P.), B., 217.
- Carlberg, J., dissociation constant of carbonic acid, A., 301. Determination of atmospheric carbon dioxide, B., 335.
- See also Kauko, Y.
- Carlin, J. C., Krase, N. W., and Tennessee Products Corp., formation of acetic acid from methyl alcohol and carbon monoxide, (P.), B., 347. Acetic acid, (P.), B., 347.
- Carlisle, P. J. See Du Pont de Nemours & Co., E. I.
- Carlsöhn, H., and Voigt, W., rapid test for corrosion-resistance of aluminium and its alloys, B., 553.
- Carlson, G. H. See Michael, A.
- Carlson, H. E., effects of preoperative medication and anaesthesia on movements of the small intestines, A., 893.
- Carlson, J. F. See Furry, W. H.
- Carlsson, F., carbonisation of coal, etc., (P.), B., 711.
- See also Kelle, W.
- Carlton, R. P. See Minnesota Mining & Manufg. Co.
- Carlyle, E. C. See Fraps, G. S.
- Carman, C. L., tube or ball mill, (P.), B., 705.
- Carman, E. F. See Harkins, W. D.
- Carmena, M., course of specific-dynamic increase in metabolism, A., 113.
- Carmichael, H. T. See Freeman, Harry.
- Carmody, W. H. See Thomas, C. Allen.
- Carne, W. M., and Martin, D., apple investigations in Tasmania, B., 166. Apple investigations, Tasmania: cool-storage scalds, B., 747.
- Carobbi, G., "mercallite," a new mineral among the products of the fumarolic activity of Vesuvius during 1933, A., 1220.
- Carolus, R. L., factors affecting absorption of magnesium by the potato plant, A., 553.
- See also Parker, M. M.
- Carothers, W. H. See Du Pont de Nemours & Co., E. I., Hill, J. W., and Spanagel, E. W.
- Carpenter, A. S. See Dunlop Rubber Co.
- Carpenter, C. F., and Morrison Carpenter & Co., Ltd., [isinglass] finings for clarifying liquids, (P.), B., 963.

- Carpenter, C. W., predisposing factors in *Pythium* root rot [of sugar cane], B., 690.
- Carpenter, D. C., optical rotation and dissociation of caseinogen, A., 506.
and Kucera, J. J., use of cellulose, casein, and other products in synthetic plastics and resins, B., 1151.
- Carpenter, G. B. See Du Pont de Nemours & Co., E. I.
- Carpenter, (Sir) H. C. H., native iron from West Greenland, A., 1100.
- Carpenter, I. C., and Miller & Co., Inc., [dowaxing of oils by] chilling, (P.), B., 217.
- Carpenter, J. B., jun., Stevenson, E. P., and Little, Inc., A. D., chromatcs, (P.), B., 991.
- Carpenter, L. V., Klinger, E. W., and Pyle, G. R., effects of road oils and tars on public water supplies, B., 480.
- Carpenter, M. S., and Givaudan-Delawanna, Inc., anhydrous chlorotone, (P.), B., 620.
- Carpenter, W. T. See Rudolfs, W.
- Carpenter Steel Co. See Palmer, F. R.
- Carpet Trades, Ltd., Swire, H. G., and Dyson, J. C., water-filtration plant, (P.), B., 176.
- Carpzow, J. B. See Planktokoll Chem. Fabr., G.m.b.H.
- Carr, A. R., and Wolczynski, T., surface tension of unassociated organic liquids: simple method of interpolation, A., 284.
- Carr, C. J., and Krantz, J. C., jun., utilisation of inulin from *Arctium lappa* and certain soluble inulins by the rat, A., 112.
See also Krantz, J. C., jun.
- Carr, E. P. See Stöcklen, H.
- Carr, J. L., and Foote, F. S., progressive obstructive jaundice; changes in elements of blood and their relation to coagulation, A., 384.
- Carr, P. H. See Wilcox, E.
- Carranza, F., toxic gases in subsoil of Lima, B., 71.
- Larranza, M., rule for calculating the formulae of acids and bases, A., 917.
- Carrasco, O., corrosion of tinned-iron containers, B., 27.
- Carratalá, R. E., haematological changes produced by poisoning with barbiturates, A., 245.
and Carboneschi, C. L., toxicity and fixation of magnesium thiosulphate in the organism, A., 119, 896.
See also Buzzo, A.
- Carré, P., relative mobilities of normal primary alkyl radicals from C₁ to C₁₆ in their chlorosulphites, A., 606.
and Libermann, D., decomposition of neutral alkyl sulphites by heat, A., 63. Preparation of veratryl chloride and formation of the 9:10-dihydroanthracene nucleus, A., 79. Preparation of acid chlorides by thionyl chloride, A., 341. Normal cyclohexyl sulphite, A., 480. Action of thionyl chloride on phenylglycollic acid, A., 747, 975. Alkyl- and aryl-sulphinic esters, A., 1105. Interaction of thionyl chloride with *m*- and *p*-aminobenzoic acids, A., 1235.
and Passedouet, H., relative mobilities of *n*-alkyl radicals from C₁ to C₁₆ in their chloroformates, A., 1105.
- Carrel, A., and Lindbergh, C. A., culture of whole organs, A., 1150.
- Carrelli, A., isotope regularities, A., 909. Intensity of Raman effect, A., 1445.
- Carreras, J. R., white sugar, B., 200.
- Carrie, C., and Herold, L., porphyrin excretion in normal pregnancy and its relationship to blood-pigment metabolism, A., 385.
- Carrière, G., Martin, P., and Driessens, J., modification of the Weltmann reaction in cancer: diminution of the coagulation band, A., 1526.
- Carriquiriborde, P. J., determination of cement in hydraulic concretes, B., 726.
- Carroll, C. J. See Faber, L. de R.
- Carroll, J., and McMahon, E., development of an improved type of winter spray for orchards, B., 1159.
- Carroll, M. L. See Martin, L.
- Carroll, S. J. See Eastman Kodak Co.
- Carruth, H. P. See Mead Corp.
- Carruthers, A., hydrolysis of glycogen by muscle and liver extracts, A., 533.
and Lee, W. Y., hydrolysis of glycogen by glycerol extract of muscle, A., 533.
- Carruthers, J. E., and Norrish, R. G. W., polymerisation of formaldehyde, A., 711.
- Carruthers, J. L., water-smoking period [of ceramic ware] and its control, B., 545.
- Carruthers, T. F. See Carbide & Carbon Chemicals Corp.
- Carson, F. L., and Pacific Lumber Co., road construction, (P.), B., 189. Paper and board, (P.), B., 897.
- Carson, F. T., paper-testing problems, B., 943.
- Carson, H. J., blue and carburetted water-gas, (P.), B., 213. Carburetted water-gas process, (P.), B., 213.
- Carswell, T. S., and Monsanto Chem. Co., aromatic sulphonates, (P.), B., 716.
- Carta Satta, G. See Molinari, H.
- Carteni, A., analyses of vegetable foods; fresh and dried fruits, B., 1020.
and Morelli, A., composition of muscle of sea animals. I. Proteins of muscle tissue of *Mugil cephalus*, A., 1144.
See also Bietti, G.
- Carter, A. S. See Du Pont de Nemours & Co., E. I.
- Carter, E. G., and Jones, D. C., validity of Antonov's rule, A., 30.
- Carter, G. S., and Mapson, L. W., interaction between acetylcholine and sterols in tissues, A., 1156.
- Carter, H. E., metabolism of norleucine, isoleucine, and valine. I. Synthesis of some phenyl derivatives, A., 746.
- Carter, H. F. See Standard Telephones & Cables.
- Carter, J. H. See Butler, R. C.
- Carter, J. L. See McKinney, R. S.
- Carter, L. S., chemical and biological changes produced in a Fox sandy loam by certain soil-management practices, B., 1108.
- Carter, N. M., Moberg, E. G., Skogsberg, T., and Thompson, T. G., data in oceanographical chemistry, A., 841.
- Carter, P. W., effect of orange juice on growth of *Laminaria* gametophytes, A., 905.
- Carter, R., recovering [volatile values from] blended fuels, (P.), B., 663.
- Carter, Richard H. See Fisher, E. A.
- Carter, Roscoe H., solvents for removal of lead arsenate residues from fruits, B., 247. Solvents for cryolite [insecticides], B., 247.
- Carter, W. A. See Norris, F. W.
- Carter, W. K., Duncombe, G. H., Hillyer, E. E., and King, R. M., influence of sodium aluminate in a fireclay sewer-pipe body, B., 901.
See also Nat. Aluminate Corp.
- Carter Carburetor Corporation. See Magruder, W. C., jun.
- Carter Coal Co. See Jones, R. H.
- Carteret, G., organicsalts of titanium, A., 479.
- Cartland, G. F., Meyer, R. K., Miller, Lloyd C., and Rutz, M. H., comparison of theelin prepared from stallion urine, human urine, and from thecelol; colorimetric determination of theelin and thecelol, A., 791.
- Cartwright, C. H., sensitivity of thermopiles, micro-radiometers, radiometers, and bolometers, A., 57. Extreme infra-red investigation of hindered rotation in water, A., 806. Extreme infra-red absorption of D₂O, ice, and D₂O in dioxan, A., 1053.
and Errera, J., intermolecular isomerism of α -picoline studied in the far infra-red, A., 680.
and Haberland-Schwarz, M., electron properties of tellurium and Wilson's mechanism of semi-conductivity, A., 566.
See also Henri, V.
- Cartwright, V. S. See Wilson, H.
- Carus Chemical Co., Inc. See Kleimenhagen, K. C.
- Cary, C. A. See Whittier, E. O.
- Casaburi, V., and Criscuolo-Cantarella, I., [sulphiding without soaking. I. Dry hides, B., 644. Tanning with complex chromium salts, B., 863.
- Casanova, M., residue from a drop of water observed under the polarising microscope, B., 208.
- Casati, R. See Gautier, C.
- Case, A. L. See Richardson, R.
- Case, L. O. See Ferguson, A. L., and Miller, N. F.
- Case, R. E. See Geiger, G. F.
- Case, S. L. See Graham, H. W.
- Case Co., J. I. See Kranick, F. N. C.
- Casein Manufacturing Co. of America, Inc. See Dunham, H. V.
- Caselli, M. L. See Gardner, D.
- Caserio, E., vitamin-C content of cucumbers and fruits of *Ziziphus sativa* and *Sorbus domestica*, A., 1176. Vitamin-C in the medlar and alkekengi, A., 1546. Milk pasteurisation, B., 698.
- Casida, L. E., production of ovulation by gonadotropic extracts, A., 791.
and Hellbaum, A. A., ovarian stimulation by adrenal extracts, A., 258.
- Casimir, E. E., and Dimitriu, M., determination of bromine or iodine values of mineral lubricating oils, B., 890.
- Casimir, H., rotation of diatomic molecules, A., 15. Hyperfine structure of europium, A., 1046.
See also Gorter, C. J.
- Casimir-Jonker, J. M. See De Haas, W. J.
- Casparis, P., incompatibility of dimethyl-aminoantipyrine, B., 828.
- Caspe, J., fur chemists' problems, B., 322.
- Caspersson, T., localisation of nucleic acids in the cell-nucleus, A., 1266.
Hammarsten, E., and Hammarsten, H., interaction of proteins and nucleic acid, A., 375.
- Cass, F. H., and Weaver, J. C., dyeing and colouring of sand, etc., (P.), B., 98.
- Cass, F. S. See Waltman, B. A.
- Cassagne, H. See Machebœuf, M. A.
- Cassel, H. M., dimensions of soap molecules as supposedly deduced from surface-tension measurements, A., 1458.
and Krumbein, E., effect of pressure on overvoltage of electrolysis of water, A., 38.

- Casselman, A. L., infra-red absorption spectrum of water containing protium and deuterium, A., 1300.
- Cassidy, H. See Holmes, H. N.
- Cassie, A. B. D., infra-red region of the spectrum. XI. Absorption spectrum and molecular structure of boron trichloride, and effect of strain on plane groups of the type XY, A., 281.
- Cassirer, S. See Hüttig, G. F.
- Casson, S. B. See Chem. & Metallurg. Corp.
- Cassoni, B. See Szegő, L.
- Castagne, E., chemical examination of the liana "Efiri." I. Localisation in the plant of a substance showing reactions of alkaloids. II. Presence of cyclohexanepentaol in "Efiri" stems, A., 133.
- Castagnou, R. See Dervillé, P. M.
- Castaing, M. See Martin, René.
- Castel, A. See Astrue, H.
- Castiglioni, A., determination of 2-phenylquinoline-4-carboxylic acid in presence of salicylic and acetylsalicylic acids, A., 990. Bromo-acidimetric determination of 8-hydroxyquinoline, A., 999. Colour reactions for differentiating tetra- from deca-hydronaphthalene, A., 1116. Differentiation of cacao butters extracted by pressure from those extracted by solvents, B., 317. Yellowing of wool by ultra-violet light, B., 540.
- Castilla, A., evaluation of urinary glucose, A., 106.
- Castille, A., and Ruppel, E., ultra-violet absorption spectra of the α -ethylenic nitriles, A., 1299.
- Castillo, A. See Aguirreche, F. D.
- Castle, W. B., aetiology of pernicious and related macrocytic anemias, A., 1268.
- Castles, J. See Howard, J. W.
- Castner, W. H., and Bethlehem Steel Co., preparation of metallic articles [steel screws], (P.), B., 907.
- Castro, R. See Portevin, A.
- Caswell, A. E., Hooke's law and crystal structure, A., 151.
- Catalán, M. A., and De Madariaga, P., spectrum of molybdenum I. II., A., 423.
- and Poggio, F., Zeeman effect in the tungsten spectrum, A., 676.
- Catalano, L. R., new tests [for nitrites, chromates, dichromates, tungstates, and auric salts], A., 316.
- Catalyst Research Corporation, metallic carbonyls, (P.), B., 495.
- See also Bennett, O. G.
- Cathcart, C. S. See Sprague, H. B.
- Cathcart, W. H. See Mouquin, H.
- Catlin, W. E. See Gilman, H.
- Catlow, E. B. See Graham, J.
- Caton, E. L. See Doyle, J. D.
- Cattaneo, C. See Sevag, M. G.
- Cattell, M., and Wolff, H. G., site of action of acetylcholine and its significance, A., 1283.
- Cattelain, E. See Bougault, J.
- Cattle, M., determination of small amounts of chloride in plant tissue, A., 1551.
- Catto, R. See Garino, M.
- Cauchois, (Mlle.) Y., L spectrum of mercury, A., 776, 800. L emission spectrum of platinum, A., 1439.
- See also Hulubei, H.
- Caughley, F. G. See White, P.
- Caujolle, P. See Bernardbeig, J.
- Caulfield, T. H. See Gibson, D. T.
- Canfield, W. J., and Riddell, W. H., factors influencing the Hill curd test, B., 475.
- See also Fay, A. G.
- Cauquil, (Mlle.) G. See Godchot, M.
- Cauwenberg, W. J., and Titanium Pigment Co., precipitation of titanium compounds, (P.), B., 673.
- Cavalli, G. See Mascherpa, P.
- Cavanagh, B. See Bottomley, G. H.
- Cave, H. W., Riddell, W. H., Hughes, J. S., Whitnah, C. H., and Lienhardt, H. F., factors influencing mineral metabolism of dairy animals, A., 980.
- Cavell, H. J., and Sugden, S., planar configuration of diamagnetic nickel complexes. II., A., 980.
- Cavers, J. R. See Hamlyn, W. L.
- Cavers, T. W., and Lee, G. M., conversion of copper matte, (P.), B., 999.
- Cavett, J. W., Rice, C. O., and McClendon, J. F., thyroglobulin studies. I. Thyroxine and iodine content of normal and goitrous human thyroglobulin, A., 1285.
- See also Holdridge, C. E.
- Cavetz, O. G., determination of calcium in soil, B., 1059.
- Cavinato, A., petrography of Sardinia; characteristic kersantite vein with prasinic "facies" from Sarrabus. II., A., 190.
- Cawley, C. M., Hall, C. C., and King, J. G., hydrogenation-cracking of creosote, B., 341.
- and King, J. G., hydrogenation-cracking of rubber, B., 563.
- Cawood, W., at. wt. determinations [of carbon, nitrogen, and fluorine], A., 425.
- Cayeux, L., constitution of senonian phosphates from Syria, A., 842. Constitution of senonian phosphates from Palestine and Transjordan, A., 1102. Constitution of senonian phosphates from Egypt, A., 1102.
- Cayford, J. M., and King, R. M., relation between cobalt and nickel oxide content and reboiling of sheet-steel ground-coats, B., 767.
- Cayrel, J. See Devaux, H.
- Cayzer, L. S. See Griffiths, E.
- Cazaubon, E., interpretation of results of soil analyses, B., 37.
- Cebolsky, N. G. See Weber, I.
- Cecconi, R., and Ferrari, C., detection and determination of rice granules in linseed cakes, B., 922.
- Čech, H., simple lecture apparatus for demonstration of the Peltier effect, A., 840.
- Celanese Corporation of America, reduction of permeability [to water] of films, foils, and other articles, (P.), B., 18.
- See also Beran, C. F., Dreyfus, C., Loughlin, K. C., Meisenheimer, T. B., Palmer, C. W., Schneider, G., and Seymour, G. W.
- Celite Corporation. See Cummins, A. B.
- Celluloid Corporation, moulding of thermoplastic materials, (P.), B., 240.
- [Plasticisers for] products containing derivatives of cellulose, (P.), B., 642.
- See also Andersen, B., Bell, W. W., Caprio, A. F., and Walsh, J. F.
- Cellulose Research Corporation. See Olsen, F., and Seavey, F. R.
- Celotex Co. See Lathrop, E. C.
- Cement Marketing Co., Ltd., and Burren, F. J., surfacing materials for building or decorative purposes, (P.), B., 951.
- Cement Process Corporation, and Blank, A. J., cementitious materials, (P.), B., 229.
- See also Blank, A. J.
- Center, R. D., inductive electric heating in chemical production, B., 67.
- Centnerszwer, M., and Checiński, T., thermal dissociation of silver nitrite, A., 1083.
- and Heller, W., mechanism of solution of metals, A., 308.
- and Szper, J., thermoregulator working without a relay, A., 598. Thermoregulator, operating without a relay, A., 721.
- Central Commercial Co. See Grundlach, H. R.
- Centrifix Corporation. See Hawley, C. G.
- Centrifugal Engineering & Patents Corporation. See Knopp, G.
- Ceramic Products Co. See Phelps, S. M.
- Cerbaro, E., microscopy problems: transverse sections [of fibres], B., 298.
- Cerchez, distribution of aromatic hydrocarbons in Rumanian benzines, B., 886.
- Cerecedo, L. R., and Allen, F. W., purine metabolism. III. Fate of guanosine and adenosine in the dog, A., 113.
- and Stokol, J. A., metabolic processes during growth. I. Metabolism of isobarbituric acid in the growing dog, A., 118.
- See also Schwob, C. R.
- Cereseto, A. See Vittori, C.
- Cerighelli, R., mechanical analysis of soils of Indochina, B., 243.
- Čerkesov, I., new alloy of copper, nickel, tin, and iron, B., 27. Influence of small quantities of nickel on the properties of bronzes and brasses, B., 770.
- Cerkovnikov, E. See Kraljčević, M.
- Cernatescu, R., and Gheller, E., colorimetric determination of nitric acid and nitrates, A., 1092.
- Papafil, M., and Poni, M., constitution of compounds formed by cyclic diamines and metallic salts, A., 1089.
- Cernescu, N. C., cation exchange and structure [in soils], B., 1009.
- Černý, M., photo-colorimetric determination of silicic acid in presence of phosphoric acid, A., 949. Behaviour of silicic acid in clarification of beet juice, B., 1111.
- See also Stehlik, V.
- Certain-Teed Products Corporation. See Hoggatt, G. A., and MacNutt, A. D.
- Ceruti, and Maestri, actual reaction of cerebrospinal fluid in meningeal affections, A., 517.
- Cerveau, M. See Gay, L.
- Cervený, C. J., and Evans, Hugh, decorative and acoustic composition, (P.), B., 593.
- Červinka, J., experiments with Hahn's reagent, A., 1093.
- Cerwin, S. S., sparking potentials at low pressures, A., 138.
- Cesari, G. C. See Scagliarini, G.
- Cestari, A., electric charge and fixation of colloids injected into the trachea. III. Colloidal ferric hydroxide, A., 654.
- Ceuterick, P., ethylenic nitriles; α -methyl- Δ^2 -heptenonitriles and α -amylacrylonitrile, A., 610.
- Cha, Y. T. See Chang, K. S.
- Chaban, A. S. See Laschkarev, V. E.
- Chabanier, E., limiting pH for plant growth in stoppe areas, B., 244.

- Chabanier, H., Lobo-Onell, C., De Castro-Galhardo, A., and Lelu, E., effect of traumatism on distribution of chlorine and sodium between blood and tissues, and on acid-base equilibrium, A., 652, 1528.
- Chaborski, G. L., and Pirtea, D., decomposition of tin dioxide, insoluble sulphates, and the corresponding minerals, A., 945.
- and Potamian, E., preparation, analysis, and qualitative study of $\text{HgSO}_4 \cdot 2\text{HgS}$, A., 945.
- Chabre, P. See Chevallier, A.
- Chabrol, E., Charonnat, R., and Cottet, J., phosphovanillic reaction: with lung; with other tissues, A., 647. Phosphovanillic reaction of bile salts in tissue extracts of the icteric dog, A., 776.
- Chabrolin, C., selective injury to cereals by sodium chlorate [weed killer], B., 472.
- Chace, E. M., health problems connected with ethylene treatment of fruits, B., 172.
- Chace Valve Co., W. M. See Matthews, H. D.
- Chadder, W. J. See Thermal Industrial & Chem. (T.I.C.), Res. Co., Ltd.
- Chadeloid Chemical Co. See Agnew, A. M., Ellis, C., and Root, F. B.
- Chadshinov, V. N., destructive hydrogenation of crude anthracene with production of low-b.p. fuels. I. and II., B., 703, 1030.
- See also Nikolski, N. A.
- Chadwick, J., Feather, N., and Davies, W. T., evidence for a new type of disintegration produced by neutrons, A., 277.
- and Goldhaber, M., disintegration by slow neutrons, A., 277. Nuclear photoelectric effect, A., 1293.
- and Lea, D. E., attempt to detect a neutral particle of small mass, A., 276.
- Chaikov, I. L., and Larson, P. S., effect of insulin on purine metabolism of the Dalmatian coach dog, A., 789.
- Larson, P. S., and Read, L. S., effect of adrenaline on purine metabolism of ordinary and Dalmatian dogs, A., 790.
- See also Kaplan, A., and Larson, P. S.
- Chain, E., and Kemp, I., isoelectric points of lecithin and sphingomyelin, A., 194.
- See also Fischgold, H.
- Chainsky, I. A. See Antipov-Karataiev, I. N.
- Chaise, P., and Fromageot, C., activator of the metabolism of *Bacterium propionicum*, A., 1029.
- Chaisson, A. F., and Friedman, M. H. F., effect of histamine, adrenaline, and destruction of the spinal cord on osmotic pressure of blood in the skate, A., 1020.
- Chaix, M., ultra-violet absorption spectra of derivatives of diphenylene sulphide and of diphenylene sulphone, A., 680.
- Ultra-violet absorption spectra of arylsulphonium salts, A., 805.
- and De Rochebouët, F., constitution of mono- and di-substituted derivatives of diphenylene sulphide, A., 627.
- See also Donzelot, P.
- Chajkinówna, S. See Truszkowski, R.
- Chakraborty, A. C. See Chowdhury, J. K.
- Chakradeo, Y. M. See Hirwe, N. W.
- Chakravarti, D., mercuration of coumarins, A., 768. Synthesis of coumarins from phenols and β -ketonic esters. III. Use of various condensing agents, A., 1503.
- Chakravarti, D., and Ghosh, B., synthesis of coumarins from phenols and β -ketonic esters. IV. Coumarins from 4-chloro- and 2-nitro-resorcinol, A., 1503.
- See also Sirkar, S. C.
- Chakravarti, R. See Basu, K.
- Chakravarti, S. N., nitration of methyl ether of salicylaldehyde, A., 1239.
- and Ganapati, K., synthesis of periquinoliazole (N-N). I. Attempted synthesis of tetrahydroperiquinoliazole, A., 93. Synthesis of parabarine. I. Synthesis of 8:17-diketo-6:17-dihydroparabarine, A., 94. Chemical investigation of Indian medicinal plants. IV. *Teramus labialis*, A., 132.
- and Swaminathan, M., o-aldehydo-carboxylic acids. II. Synthesis of 4-methoxyphthalaldehydic acid and a new synthesis of opianic acid, A., 490.
- New synthesis of 3:11-dimethoxyoxyprotoberberine, and syntheses of 2:3-methylenedioxy-11:12-dimethoxyoxyprotoberberine and 2:3:11:12-tetramethoxyoxyprotoberberine, A., 767.
- Chakravorty, P. N. See Fernholz, E.
- Chakroborti, B. See Datta, S.
- Chalat, K. D. See Tananaev, N. A.
- Chalezka, E. G. See Sadikov, V. S.
- Chalfin, E., tungsten-thorium problem. II. Anomalous activation, A., 557.
- Chalier, J., Jeune, M., and Fournier, R. J., experimental azotemia by injection of diphtheria toxin in the guinea-pig, A., 1527.
- Chalileev, P. A., change in resistance of magnetite in a magnetic field at low temperature, A., 1196.
- Chalisev, A. A., and Katalimov, M. W., [effect of] micro-elements [in soils on response to liming], B., 1156.
- Chalkin, F. C., electronic energy bands of solid copper, nickel, cobalt, and iron, A., 909.
- Challenger, F., and Ellis, L., formation of organo-metalloidal compounds by micro-organisms. III. Methylated alkyl- and dialkyl-arsines, A., 738.
- and Harrison, J. B., sulphur compounds of technical interest; isomeric thiophthens, A., 1249.
- and Higginbottom, C., production of trimethylarsine by *Penicillium brevicaulis* (*Scopulariopsis brevicaulis*), A., 1027.
- Challenor, W. A. P. See Imperial Chem. Industries.
- Chalmers, B., interference extensometer and observations on elasticity of lead, A., 599. Twinning of single crystals of tin, A., 1060.
- and Jones, W. D., striations in tin coatings on copper, B., 996.
- See also Hoare, W. E.
- Chalmers, T. A. See Banks, T. E., Brasch, A., Hopwood, F. L., and Szilard, L.
- Chalonge, D. See Barbier, D.
- Chambadal, P., freezing of water by fractional evaporation, B., 433.
- Chambard, P., and Abbassi, A., sulphur tannage, B., 1008.
- See also Meunier, L.
- Chambaz, M. See Machebeuf, M. A.
- Chamberlain, C. E., adhesives, (P.), B., 371.
- Chamberlain, J. R., and York Ice Machinery Corp., solid carbon dioxide, (P.), B., 992.
- Chamberlain, J. S., Chap, J. J., Doyle, J. E., and Spaulding, L. B., synthesis of 5-phenyl-5-alkylbarbituric acids, A., 601.
- Chamberlain, R. N., and Gould Storage Battery Corp., storage-battery plate material, (P.), B., 1100.
- Chamberlin, R. T., pre-Cambrian granites in the Canadian Shield, A., 1220.
- Chambers, E. W., reversible rectification in electrolytic rectifiers, B., 363.
- Chambers, W. H., Himwich, H. E., and Kennard, M. E., glucose excretion after exercise in experimental diabetes, A., 383.
- Chamelin, I. M. See Harrow, B.
- Chamié, (Miss) C., supplementary radiations in the recoil from Th active deposit, A., 6.
- Chaminade, R., equilibrium between the absorbing complex and the soil solution, B., 198.
- See also Potel, P.
- Chamot, E. M., and Brickenkamp, R. W., microscopical chemical reactions of some polythionic acids, A., 316.
- Champetier, G., laboratory apparatus for electrolytic concentration of H_2 , A., 466.
- See also Abadie, P., and Plantefol, L.
- Champion Fibre Co. See Murdock, H. R.
- Champy, C. See Berdnikoff, A.
- Chance, H. M., separation of materials of differing specific gravities, (P.), B., 481, 1075.
- Chandlee, G. C., n-propylarsinic acid for [determination of] zirconium, A., 598.
- See also Arnold, F. W., jun.
- Chandler, D. See South Metropolitan Gas Co.
- Chandler, W. H., and Hoagland, D. R., "little leaf" or "rosette" of fruit trees in California, B., 691.
- Hoagland, D. R., and Hibbard, P. L., "little-leaf" or "rosette" of fruit trees, A., 554.
- Chandler, William H., cleaning of metal moulds used for vulcanisation of rubber articles, (P.), B., 114.
- Chandrasekhar, S., and Rosenfeld, L., electron pairs and theory of stellar structure, A., 912.
- Chaney, N. K., Hamister, V. C., and Glass, S. W., properties of carbon at arc temperature, B., 558.
- Kiefer, E. F., and Nat. Carbon Co., Inc., forming an impervious carbon article [for handling corrosive fluids], (P.), B., 982.
- Chang, C. L., and Chow, J., extraction of alumina from Poshan bauxite by soda-ash fusion, B., 305.
- and Hsieh, K. H., alumina from Poshan bauxite, B., 1141.
- Chang, C. Y., Phillips, P. H., and Hart, E. B., effect of feeding raw rock phosphate on fluorine content of organs and tissues of dairy cows, A., 243.
- Chang, D. Y., acyl derivatives of phenylcyclohexane, A., 215.
- Chang, F. T., and Wick, H., overvoltage of halogens, A., 707.
- Chang, H. C. See Sah, P. P. T.
- Chang, H. L., and Ling, C., drying of tung oil, B., 912.
- See also Chéou, F. K.
- Chang, H. Y., and Chao, Y. S., tallowiness and acidity of wheat flour, B., 872.
- See also Chang, K. C.
- Chang, K. See Meng, H. M.
- Chang, K. C., and Chang, H. Y., gasoline from waste cottonseed oil, B., 179.
- Chang, H. Y., and Chang, T. H., gasoline from waste cottonseed oil. II., B., 887.

- Chang, K. C., and Chao, Y. S., vegetable casein from soya bean and peanut, B., 875.
- and Hsieh, M. S., calculation of heating values of Chinese coals from proximate analysis, B., 1027.
- and Su, Y. F., apparent rates of oxidation of massicot and litharge, A., 710.
- Chang, K. S., and Cha, Y. T., solubility of cuprous chloride in concentrated hydrogen chloride, A., 292.
- and Liu, Y. M., solubility of cuprous chloride in alcoholic hydrogen chloride, A., 292.
- Chang, M. C., and Kao, C. H., 2:4:6-trinitrobenzoyl chloride as a reagent for the identification of alcohols, A., 1259.
- Chang, T. H. See Chang, K. C., and Shaffer, M.
- Chang, T. L. See Riesenfeld, E. H.
- Chang, T. Y., and Wang, D. S., electrolytic reduction of *m*-halogenonitrobenzenes to the azo-compounds, A., 1232.
- See also Sah, P. P. T.
- Chang, W. Y., and Hsieh, Y. M., electrical insulation of baked soapstones, B., 858.
- Chang, Z. T., dielectric constant of liquids under high pressure, A., 683.
- Channon, H. J., Devine, J., and Loach, J. V., hydrocarbons of pig liver, A., 233.
- and Wilkinson, H., choline and the "cholesterol" fatty liver, A., 244.
- Protein and the dietary production of fatty livers, A., 523.
- See also Aylward, F. X.
- Chanoz, M., Florence, G., and Perrottet, (Mlle.) S., calomel electrodes, A., 320.
- Chanutin, A., experimental renal insufficiency produced by partial nephrectomy. III. Diets containing whole dried liver, liver residue, and liver extract, A., 237.
- Chao, C. Y., emission of neutrons from radioactive sources, A., 1440.
- and Kung, T. T., interaction of hard γ -rays with atomic nuclei, A., 678.
- Chao, E. H. See Tang, T. H.
- Chao, H. L. See Ts'ai, L. S.
- Chao, I., action of electrolytes on electrical stimulation of skeletal muscle, A., 1023.
- Hydrogen-ion concentration and the rhythmic activity of the nerve cells in the ganglion of the *Limulus* heart, A., 1414.
- See also Engel, G. L.
- Chao, T. L. See Zé, N. T.
- Chao, W. M., durains and cannel coals, B., 436.
- Chao, Y. S. See Chang, H. Y.
- Chap, J. J. See Chamberlain, J. S.
- Chapas, G., thermodynamics of the binary system: *p*-cresol-benzoic acid, A., 1077.
- Chapheau, M., action of vital stains and nitrophenols on respiration of oyster-tissues and blood-cells of *Sipunculus*, A., 245.
- Chapin, R. M., effect of p_H on decomposition of hypohalites, A., 42.
- Chaplin, R. S. See Gas Light & Coke Co.
- Chapman, A. T., chlorine-sensitized photochemical oxidation of gaseous chloroform, A., 590.
- Peroxidation of chloroform, A., 590.
- Chapman, A. W., Beckmann change. III. Rearrangement of ketoxime hydrochlorides, A., 1498.
- Chapman, C., and Monsanto Holdings, Ltd., [agents for] improving wetting-out properties of [porous or fibrous] materials, (P.), B., 847.
- Chapman, D. L., and Gregory, G., catalysis by palladium of the union of hydrogen and oxygen: new phenomenon of contact catalysis, A., 43.
- Chapman, E. See Imperial Chem. Industries.
- Chapman, G. See Fawcett, Preston & Co., Ltd.
- Chapman, G. A., Littleford, J. W., and Minerals Separation North Amer. Corp., concentration of [phosphate] minerals, (P.), B., 1092.
- Chapman, G. H., and Berens, C., crystal-violet-agar as a differential medium for *Staphylococci*, A., 1169.
- Chapman, H. See Whitfield Bros.
- Chapman, H. D., inorganic phosphate in green plant tissue as a measure of phosphate availability, B., 741.
- Chapman, P. J., and Dean, R. W., larocidal efficiency of certain spray combinations against the fruit tree leaf roller, B., 968.
- Chapman, R. W., and Williams, C. R., evolution of the White Mountain magma series, A., 1345.
- Chapman, S., spray electrification of liquids, A., 1446.
- Chapman, W. See Dufaycolor, Ltd.
- Chapman, W. H. See Internat. Latex Processes, Ltd.
- Chapman Valve Manufacturing Co., and Malcolm, V. T., nitrogenisation of steel or alloy-steel articles, (P.), B., 158*.
- See also Malcolm, V. T.
- Chappell, M. L., motor fuel from hydrocarbon oils, (P.), B., 1128.
- Chappell, N. See Imperial Chem. Industries.
- Charak Chemical Co. See Serrington, W. B.
- Charap, M. M., chemical activity at the cellulose water-line, B., 350.
- Charaux, C., and Rabaté, J., biochemistry of the peach tree, *Persica vulgaris*, L.; persicoside, A., 906.
- Constitution of genistein, A., 985.
- Sophoricoside, a heteroside of the fruits of *Sophora japonica*, L., A., 1041.
- See also Bridel, M.
- Charch, W. H., and Du Pont Cellophane Co., Inc., moisture-proof material, (P.), B., 351.
- Hyden, W. L., Finzel, T. G., and Du Pont Cellophane Co., Inc., adhesive [containing rubber], (P.), B., 115.
- Hyden, W. L., Siemann, J. C., and Du Pont Cellophane Co., Inc., moisture-proof [wrapping] material, (P.), B., 721.
- and Scroggie, A. G., determination of water-vapour permeability of cellulose wrapping materials, B., 1088.
- Chargaff, E., and Lederer, E., carotenoids of two acid-fast bacteria, A., 663.
- and Schaefer, W., serological analysis of the different lipid fractions of BCG, A., 1028.
- Charit, A. J., and Khaustov, N. W., flavin content of animal tissues under different conditions, A., 233.
- Chariton, J. B. See Andreev, K. K.
- Charlamov, V. N. See Lapin, N. P.
- Charles, A. F., Fisher, A. M., and Scott, D. A., blood coagulant from ox-lung, A., 644.
- and Scott, D. A., preparation of heparin from ox-lung, A., 646.
- Charles, W. L. See Imperial Chem. Industries.
- Charlesworth, S., and Surface Combustion Corp., continuous furnace for [heat treatment of steel], (P.), B., 192.
- Charlewood, G. H., nature and occurrence of carbonates in veins, A., 1346.
- Charley, V. L. S., fermentation control of ciders by the centrifuge method, B., 249.
- Action of cider on metals, B., 249.
- The biochemist in the cider factory, B., 284.
- Rôle of pectin in cider-making processes. I. Introduction and historical. II. Pectin changes associated with maceration and fermentation: effects of addition of pectin solutions to dry ciders, B., 824.
- Fruit products. IV. Clarification of unfermented and fermented apple juice, B., 824.
- Preservation of fruit with sulphur dioxide; effect of hot and cold methods on residual sulphur dioxide in jam, B., 826.
- Charlot, G., catalytic oxidation of organic compounds in the vapour state, A., 43.
- Charlton, G., and Wilcox-Rich Corp., steel alloy, (P.), B., 679.
- See also Heron, S. D.
- Charman, W. M., Ward, P. R., and Ferro Eng. Co., refractories, (P.), B., 101.
- Refractory, (P.), B., 101.
- Charmandarian, M. O., and Brodovitch, K. J., influence of the carrier on contact properties of vanadium pentoxide, B., 146.
- and Dachniuk, G. H., catalytic solution of copper in sulphuric acid, A., 175.
- Charmetant, C., electrolysis of solutions of zinc chloride in mixtures of water and ethyl alcohol, A., 456.
- Electrolysis of chlorides of nickel and cobalt dissolved in mixtures of water and ethyl alcohol, A., 1086.
- Charnley, F., calculations in study of oils and fats, with special reference to fish oils. I., B., 416.
- Changes in composition of pilchard oil on hydrogenation, B., 683.
- Charonnat, R., [detection of traces of fluoro- and volumetric determination of zirconium], A., 316.
- and Roche, (Mlle.) S., fluorine content of French mineral waters, A., 190.
- See also Chabrol, E.
- Charosky, L., basal metabolism in pulmonary tuberculosis; observations of about 240 cases, A., 1403.
- Charpentier, P., chlorobutene C_4H_7Cl obtained in action of phosphorus pentachloride on methyl ethyl ketone, A., 62.
- Charriou, A., recent progress in colour-sensitising of photographic emulsions, B., 478.
- and Valette, (Mlle.) S., influence of cations on sensitivity of photographic emulsions, A., 712.
- Influence of alkali iodides on properties of photographic emulsions, A., 712.
- Influence of water on sensitivity of photographic emulsions, A., 831.
- Cellulose acetate films undeformable by water, B., 95.
- Influence of cystine on supersensitive photographic emulsions, B., 878.
- Deformation of photographic films, B., 1069.
- Production of undeformable cellulose acetate films for photographic purposes, B., 1069.
- Solarisation of photographic emulsions, B., 1166.
- Charukhina, Z. N., and Raspopova, L. G., influence of furfuraldehyde on iron, B., 104.

- Chase, C. T., and Willey, C. H., biological effect of ionised air, A., 1276.
- Chase, H., finishes for zinc and aluminium die-cast parts, B., 32. Properties of moulded dielectrics and their measurement, B., 461.
- Chase, M. F. See Skogmark, J.
- Chase, M. W. See Landsteiner, K.
- Chase Companies, Inc. See Crampton, D. K.
- Chassevent, L., formation of definite crystalline compounds at commencement of hardening of silicate cements, B., 23. Action of water on Portland cement: calcium hydrosilicate, B., 407.
- Chastellain, P. See Goldstein, H.
- Chaston, J. C., effect of interrupted straining on elongation of lead, B., 954.
- Chatelain, P., refractive indices of *p*-azoxyphenetole in the state of anisotropic liquid, A., 431.
- Châtelet, M., reactions of cobalt sulphate in glycerol, A., 325. Transition compound in formation of complexes of trivalent cobalt, A., 461.
- Chater, W. J., preliminary note on certain vegetable tannins and their conversion into anthocyanidins, B., 739.
- "Chatillon" Società Anonima Italiana per le Fibre Tessili Artificiale, means for comparing and measuring degree of lubrication of textile threads and filaments, (P.), B., 18.
- Chattaway, F. D., and Ashworth, D. R., action of chlorine, bromine, and iodine monochloride on aryl azoacetates and related compounds, A., 206.
- Ashworth, D. R., and Grimwade, M., 3-carbethoxy-4-hydroxy-1-nitrotolyl-pyrazoles, A., 501.
- and Irving, H., action of halogens on arylhydrazones of unsaturated aldehydes, A., 344.
- and Parkes, G. D., derivatives of 3:5-dihalogen-substituted anilines, A., 1231.
- and Witherington, P., condensation of halogen-substituted aldehydes with nitromethane, A., 1224.
- Chatterjee, B. K., and Vaishya, B. L., determination of the viscosities of solutions by the Scarpa method, A., 599. Reaction between iodo and oxalic acid in ethylene glycol as a solvent, A., 715.
- Chatterjee, K. See Datta, S.
- Chatterjee, N., diphenyl series. I. Synthesis of unsymmetrical derivatives of diphenyl. II. Synthesis of 9-hydroxyphenanthrene. III. [Synthesis of] phenanthrene [derivatives], A., 1361, 1496.
- See also Mitter, P. C.
- Chatterjee, S. D. See Raha, P. K.
- Chaturvedi, H. S., acclimatisation of yeast to "high-temperature-high alcohol complex," B., 744.
- Chaudhuri, D. P. R., gyromagnetic effect of some ferromagnetic compounds, A., 922.
- Chaudhuri, S. G. See Mukherjee, Jnanendra Nath.
- Chaudron, G., application of thermomagnetic analysis to study of the oxides of iron, A., 1310.
- and Dandres, R., alloys formed in solid solutions of aluminium and magnesium, B., 678.
- See also Girard, A., Herzog, E., Michel, A., and Moreau, L.
- Chaudun, A., enzymic hydrolysis of sucrose in presence of formaldehyde, A., 783. Flocculation of the pectin substances [of sugar beets] by alkaline-earth bases, B., 869.
- See also Colin, H.
- Chaussain, M. See Cournot, J.
- Chavarot, M. See Hamel, J.
- Chaze, J., alkaloids of pomegranate (*Punica granatum*), A., 673.
- Chéal, W. F., apple-scab spraying experiments in the Wisbech area. III., B., 472.
- Chećinski, T. See Blumenthal, M., and Centnerszwer, M.
- Chédin, J., Raman effect in sulphuric acid-nitric acid mixtures, A., 807. Raman spectrum of nitrogen pentoxide, A., 1445.
- Cheesman, G. H., and Duncan, D. R., oxygen preparation from sodium peroxide, A., 181.
- Cheetham, H. C., and Bakelite Corp., preparation of [synthetic resin] emulsions, (P.), B., 816.
- Chegis, A. F. See Andreevski, D. N.
- Chegwidden, R. A. See Bell Telephone Labs.
- Chekoun, L. See Kahn, J.
- Chélaré, G. See Höhne, E.
- Chelle, Dubaquié, and Turbet, toxicological study of clarification [of wines] by Prussian-blue, B., 744.
- Chelokhanova, V. See Karassik, V.
- Cheltnam, C. H. See Cheltnam, C. H. W.
- Cheltnam, C. H. W., and Cheltnam, C. H., centrifugal apparatus for separating and collecting dust or other solid particles from air and gases, (P.), B., 659, 931.
- Cheltzov. See under Tschelzov.
- Chemical Construction Corporation, Oliver, T. C., and Spangler, S. F., treatment of acid [spent pickling] solutions, (P.), B., 147.
- See also Hechenbleikner, I.
- Chem. Engineering Corporation, and Christensen, A., regeneration of spent ammoniacal cuprous solutions from gas-washing processes, (P.), B., 440.
- and Dely, J. G., purification of gases by treatment with copper-ammonia solutions, (P.), B., 803.
- See also Christin, P., Dely, J. G., and Richardson, R. S.
- Chem. Engineering & Wilton's Patent Furnace Co., Ltd. See Wilton, T. O.
- Chem. Foundation, Inc. See Wagner, R. I.
- Chem. Holding Corporation. See Richter, W. F.
- Chem. Machinery Corporation. See Field, C.
- Chem. Manufacturing Co. See Elliott, P. H.
- Chem. & Metallurgical Corporation, Ltd., and Casson, S. B., manufacture of hydrochloric acid and apparatus therefor, (P.), B., 21.
- Chem. Reactions, Ltd., and Burns, J., destructive hydrogenation of carbonaceous materials, particularly high-temp. tars, (P.), B., 891.
- Chem. & Research Corporation. See Allison, D. K.
- Chemipulp Process, Inc. See Dunbar, T. L.
- Chemisch-Pharmazeutische Akt.-Ges. Bad Homburg Werk Frankfurt a./M., compound of theophylline and [di]ethanolamine, (P.), B., 46.
- Chemische Fabrik R. Baumheier A.-G., anti-corrosion coating composition, (P.), B., 1056.
- Chem. Fabr. J. A. Benckiser G.m.b.H., anhydrous citric acid, (P.), B., 620.
- and Draibach, F., glass of high permeability to ultra-violet rays, (P.), B., 1143.
- Chem. Fabr. Buckau, chlorinated rubber, (P.), B., 197.
- Chem. Fabr. Budenheim Akt.-Ges., simultaneous manufacture of primary sodium phosphate and boric acid, (P.), B., 305.
- Chem. Fabr. Curtius Akt.-Ges., filling of reaction chambers or towers, (P.), B., 881.
- Chem. Fabr. Flörsheim H. Noerdlinger Akt.-Ges., colloidal graphite suspensions, (P.), B., 9.
- Chem. Fabr. Grunau, Landshoff & Meyer Akt.-Ges. See Franke, E.
- Chem. Fabr. Halle-Amendorf Gebrüder Hartmann, polychrome high-gloss printed matter, (P.), B., 511. Printers' varnishes, (P.), B., 1056.
- Chem. Fabr. von Heyden Akt.-Ges., therapeutic agents, (P.), B., 430. Compounds [resins] of the pyridino series, (P.), B., 511. [Pyridyl]-substituted barbituric acids, (P.), B., 524. Preparations having an anti-emetic action, (P.), B., 573. Pyridine compounds, (P.), B., 585.
- See also Hoessle, C. H. von, Philipp, C., and Steingroever, F. A.
- Chem. Fabr. Kalk G.m.b.H., and Oehme, H., preservation of green foodstuffs [fodder], (P.), B., 782.
- Chem. Fabr. Marienfelde G.m.b.H., derris-root extracts and other plant extracts, (P.), B., 969.
- Chem. Fabr. L. Meyer, preparations for eradicating weeds, (P.), B., 518.
- See also Schering-Kahlbaum Akt.-Ges.
- Chem. Fabr. Pfersee G.m.b.H., aqueous, positively charged emulsions, (P.), B., 182.
- Chem. Fabr. Pott & Co. See Becker, J.
- Chem. Fabr. vorm. Sandoz, azo-dyes [of the carbazole series] and intermediate compounds used in their manufacture, (P.), B., 94. [Acid] dyes of the anthraquinone series, (P.), B., 95. Water-soluble anthraquinone dyes, (P.), B., 220. Iodonaphtholdisulphonic acids [pharmaceuticals], (P.), B., 524. Detergent, cleansing, emulsifying, and dispersing agents, (P.), B., 619. Detergent, cleansing, emulsifying, softening, and dispersing agents, (P.), B., 664. [Chromable green] monoazo-dyes, (P.), B., 717. Alkylated 5-phenyl-5-ethylhydantoin, (P.), B., 830.
- See also I. G. Farbenind. Akt.-Ges.
- Chem. Fabr. Stockhausen & Co., sulphonated halogen derivatives of aliphatic alcohols, (P.), B., 13. Wetting, penetrating, dispersing, foaming, and cleansing agents used in the textile industry, (P.), B., 59.
- Chem. Fabriken K. Albert Ges.m.b.H., [alkyd] synthetic resins, (P.), B., 736.
- Chem. Fabr. Wiernik & Co., A.-G., J., diamino-alcohols of aromatic series, (P.), B., 840.
- Chem. Forschungsges.m.b.H., vinyl alcohol, (P.), B., 1037.
- See also Herrmann, W. O.
- Chem. & Pharmazeutische Fabrikation G. Henning. See Ostern, P.

- Chem. Werke Marienfelde Akt.-Ges. See Pollak, J. B.
- Chen, A. L. See Chen, K. K.
- Chen, C. Y., non-identity of adenine and vitamin-B₄, A., 416. Effect of some yeast extract factors on the growth of rats on high-fat diet, A., 1286. Effect of insulin on the glycogen content of livers of polycuritic animals, A., 1422. See also Liu, T.
- Chen, G. M. See Ferguson, A. L.
- Chen, H. K. See Yu, T. F.
- Ch'en, J. L., and Band, W., longitudinal thermo-electric effect. V. Silver, A., 1312.
- Chen, K. C. See Liu, S. H.
- Chen, K. H. See Kao, C. H.
- Chen, K. K., Anderson, R. C., Freihage, I. J., and Chou, T. Q., pharmacological action of ephedine, A., 893.
- and Chen, A. L., alkaloids of han-fang-chi, A., 873.
- Chen, A. L., and Rose, C. L., action and toxicity of retrorsino, A., 1158.
- Rose, C. L., Anderson, R. C., and Chou, T. Q., pharmacological action of fritimino, A., 894.
- See also Jensen, H.
- Chen, P., *p*-nitrobenzylhydrazide as reagent for the identification of aldehydes and ketones, A., 1259.
- Ch'en, W. K., preparation of the specific soluble substance from vaccinia virus, A., 788.
- Chen, Y. H. See Chi, Y. F., and Leo, S. T.
- Cheney, C. H. See Du Pont de Nemours & Co., B. I.
- Cheney, R. H., cardiac automaticity effects of caffeine and nicotine; influence of caffeine, nicotine, and caffeine-nicotine antagonism on the sino-auricular strip response, A., 1155.
- Cheng, F. W., testing purity of China-wood oil, B., 318.
- and Wang, H., micro-determination of iodine in common salt, B., 990.
- See also Adolph, W. H.
- Cheng, H. C., and Lecomte, J., modes of vibration of dihalogen derivatives of ethane, A., 1053. Vibration frequencies of chlorine derivatives [of some aliphatic compounds], A., 1053.
- Cheng, Y. C., and Adolph, W. H., preparation of *d*-glutamic acid, A., 70.
- Cheng Da-Chang, and Houng, L., precipitation of titanium as phosphate, A., 1095.
- See also Francis, M.
- Chéou, F. K., monomagnesium acetylene, A., 1357.
- and Chang, H. L., special coal tar for road-paving, B., 1028.
- and Yung, F., action of zinc chloride and sulphuric acid on coal tar, B., 1028.
- Chepelevetzki, M. L. See Bljacher, G. S.
- Cheplin, H. A. See Reichel, J.
- Chéramy, P., and Lobo, R., detection of barbituric acid derivatives in blood, A., 118. Extraction of barbituric derivatives from viscera by acetone, A., 118.
- Cheraskova, E., and Veissbruth, L., separation and determination of [elementary] sulphur and selenium, A., 1336.
- Cherbuliez, E., and Herzenstein, A., determination of amino-acids and polypeptides, A., 102. Analysis of reducing acids of sulphur, A., 184.
- Cherbuliez, E., and Herzenstein, A., new sulphur constituent of the thermal waters of Pistany (Czechoslovakia), A., 190.
- and Mirimanoff, A., application of the differential determination of albumoses, polypeptides, and amino-acids, using ninhydrin, to blood, A., 1517.
- and Weibel, R., reaction of sulphur with water at temperatures below 100°, and its geochemical significance, A., 1470.
- Cherczenko, P. See Jouravsky, G.
- Cherepennikov, A. A., extraction and analysis of gases in rocks and minerals, A., 52.
- Chernikowski, M. G. See Sergeev, M. I.
- Chernov, G. I., and Sobolev, B. N., determination of sulphur in petroleum products by the lamp method, B., 86.
- Chernozhukov. See under Tschernoshukov.
- Chernui, L. M., and Loginova, A. I., separation of phosphogypsum, B., 671.
- Cherry, O. A., and Economy Fuse & Manuf. Co., hot-moulding composition, (P.), B., 1057. Colourless synthetic resin, (P.), B., 1153. Synthetic resin, (P.), B., 1153.
- Cherry, T. H., factors influencing the sedimentation rate of erythrocytes, A., 1391.
- Chérut, P., influence of temperature on absorption and polarisation of fluorescence in fluorescein, A., 565.
- Cheshunt Experiment Station, tomato culture, B., 741.
- Chesley, L. C., validity of iodine and copper reduction methods for amylase, A., 402. Effect of light on the sensitivity of wheat seedlings to X-rays, A., 1022. See also Sugiura, K., and Woodward, H. Q.
- Chesney, J., and McCoord, A. B., vitamin-A of serum following administration of halibut-liver oil in normal children and in chronic steatorrhea, A., 129.
- Chesnokov, N., quality of certain softeners in rubber mixes, B., 467.
- Chesny, H. H., and Union Oil Co. of California, production of liquid hydrocarbons from hydrocarbon gases, (P.), B., 343.
- Chester, C. A. See Pirie, W. B.
- Chester, K. S., serological estimate of the absolute concentration of tobacco mosaic virus, A., 1182. Three *Phytophthora* diseases of lilac and their pathogens, B., 517.
- Chesterman, D. R., complex iron compounds. I. Formation and solvation of ferrous chloride in non-aqueous liquids, A., 1112.
- Chesters, J. H., Clark, George L., and Lyon, K. C., burning of magnesite bricks. III. Crystal size determination by the Laue diffraction method, B., 545.
- and Parmelee, C. W., reaction-expansion measurements on chromite and allied spinels, B., 454. Burning of magnesite bricks. II., B., 545.
- Chevalier, R. See Guittonneau, G.
- Chevallier, A., spectrophotometry in the ultra-violet and its application to biological analysis, A., 906.
- and Baert, H., influence of vitamin-A on metabolism of rats and guinea-pigs, A., 261.
- and Chabre, P., spectrophotometric determination of vitamin-A, A., 414.
- and Choron, Y., presence of vitamin-A and substance A' in hepatic tissue, A., 668. Detection of vitamin-A in the blood, A., 668.
- Chevallier, A., Malméjac, J., and Choron, Y., influence exerted by the nervous system on the vitamin-A content of the blood, A., 1034.
- and Roux, H., respiration of tissues containing varying amounts of vitamin-A, A., 792.
- See also Malméjac, J.
- Chevenard, P., heterogeneity of a solid solution and its mechanical and chemical properties, A., 23. Viscous deformation [creep] of iron and nickel wires, B., 310. Photographically-registering micro-machine for mechanically testing metals, B., 310.
- and Waché, X., accelerating effect of a mechanical sinusoidal tension on the tempering of an iron-nickel-chromium-carbon austenite quenched at a high temperature, B., 994.
- See also Portevin, A.
- Chevonis, N. D., and Synthetical Labs., manganese carboxylates [pharmaceuticals], (P.), B., 1166.
- Chevrel, F. See Chevrel-Bodin, M. L.
- Chevrel-Bodin, M. L., Chevrel, F., and Cormier, M., flocculating power of cancerous sera, A., 1148.
- and Cormier, M., influence of potassium and calcium chlorides and sodium, potassium, and calcium acetates on flocculation of hydrosols (organ extracts) by human serum, A., 236.
- Chèvremont, M., modifications of radio-sensitivity of the thymus after injection of cyclopentylidinitrophenol in the guinea-pig, A., 781. Modifications of metabolism of the thymus through injection of cyclopentylidinitrophenol in the guinea-pig, A., 781.
- Chew, W. B., Stetson, R. P., Smith, G. Van S., and Smith, O. W., oestrogenic, luteal, and gonadotropic hormones in haemophilia, A., 666.
- Chi, Y. F., Chinese perilla, A., 420.
- and Chen, Y. H., preparation of uracil, A., 629.
- and Ho, T. Y., preparation of 6-thiocyano-2-ethylthiol-5-phenylpyrimidine, A., 629.
- and Lee, Y. M., preparation of ethyl benzoylacetate, A., 618.
- and Ma, C. M., rearrangement of ethyl 6-thiocyano-2-ethylthiopyrimidine-5-acetate into its thiocarbimide modification, A., 629. Constituents of roots of Ch'ai Hu (*Bupleurum falcatum*, L.), A., 905.
- and Ming, S. Y., action of potassium cyanate on 6-chloro-2-ethylthiol-5-carbethoxypyrimidine, A., 629.
- and Read, B. E., isolation of vitamin-C from Chinese iris, A., 262. Vitamin-C content of Chinese foods and drugs, A., 903.
- and Sze, C. H., preparation of *tert*-amyl bromide, A., 605. Preparation of ethyl 6-chloro-2-ethylthiopyrimidine-5-acetate, A., 629.
- and T'ien, Y. L., pyrimidines; molecular rearrangement of 2-ethylmercapto-6-thiocyano-5-ethylpyrimidine, A., 358.
- and Wong, Y. T., root of *Peucedanum decursivum*, Maxim (Umbelliferae), A., 420.
- Chia, P. T. See Tseng, C. L.
- Chiaeppe, E., effect of tonsillary extract on diuresis and on elimination of sodium chloride, A., 1267.

- Chiancone, F. M., eosin and neutral sulphur, A., 642.
See also Musajo, L.
- Chiang, C. H. See Pan, Z. H.
- Chiang, M. C. See Tseng, C. L.
- Chiang, S. H. See Sah, P. P. T.
- Chiashi, E., preservation of sweetened condensed milk, (P.), B., 380.
- Chiba, T., carbohydrate metabolism in Graves' disease and goitre: effect of operative treatment, A., 1009.
- Chibisov. See under Tschibisov.
- Chibnall, A. C., and Piper, S. H., metabolism of plant and insect waxes, A., 264.
Piper, S. H., Pollard, A., Williams, E. F., and Sahai, P. N., constitution of the primary alcohols, fatty acids, and paraffins present in plant and insect waxes, A., 267.
See also Piper, S. H.
- Chicago Hydraulic Oil Co. See Robinson, J. B.
- Chicago Paint & Varnish Production Club, livering [of varnishes], B., 32.
- Chicago Pneumatic Tool Co. See Davenport, R. W.
- Chichester, D. C. See Morgan, V. E.
- Chichester, D. F. See Russell, W. C.
- Chick, H., Copping, A. M., and Edgar, C. E., water-soluble B-vitamins. IV. Components of vitamin-B₆, A., 544.
- Fixsen, M. A. B., Hutchinson, J. C. D., and Jackson, H. M., biological value of proteins. VII. Influence of variation in level of protein in diet and of heating protein on its biological value, A., 1153.
- Hutchinson, J. C. D., and Jackson, H. M., biological value of proteins. VI. Balance-sheet method, A., 1153.
- Chicos, I. See Nenitzescu, C. D.
- Chidester, G. H. See Billington, P. S.
- Chidsey, J. L., and Dye, J. A., increase in insulin secretion following injections of adrenaline and its relation to the high liver-glycogen values obtained, A., 1172.
- Chien, S. L. See Kao, C. H.
- Chiera, G., and Geigy A.-G., J. R., leather, (P.), B., 739.
- Chierici, E., preparation of sterile solutions, B., 572.
- Chiewitz, O., and Hevesy, G. von, radioactive indicators in the study of phosphorus metabolism in rats, A., 1531.
- Child, R., seed oil of *Aegle marmelos*, Corr., A., 551. Report on the soap industry in Ceylon, B., 317.
- Childs, A. E., and Ball, W. C., determination of traces of cyanides in water, B., 656.
- Childs, H. M. See Looney, J. M.
- Chiles, J. A., mechanically operated valve designed to withstand atmospheric pressure, for use in high-vacuum work, A., 1098.
- Chili Exploration Co. See Holderer, G. B., and Hulme, P. M.
- Chillas, R. B., jun., and Atlantic Refining Co., fractional distillation, (P.), B., 788.
- Chilton, T. H., and Colburn, A. P., distillation and absorption in packed columns; convenient design and correlation method, B., 529. Mass transfer (absorption) coefficients; prediction from data on heat transfer and fluid friction, B., 577.
- Chin, K. S. See Wei, N. S.
- China, F. J. E., new-type Premier [colloid] mill, B., 177. Practical considerations in manufacture of emulsions, B., 433. and Premier Colloid Mills, grinding and emulsifying machines, (P.), B., 929.
- Ching-Yeung Hui, crystal structure of sodium thioantimonate, A., 152.
- Chinn, M., and Phelps, E. L., silk weighting, B., 589.
- Chinoy, J. J., Edwards, F. W., and Nanji, H. R., takadiastase method for determining starch, B., 40. New iodine method for determination of starch. I. Soluble starch. II. Natural starches and flour, B., 40.
- Chintschin, T. G., hydration of vegetable fibres during beating and its effect on paper strength, B., 1039.
- Chiosa, L. T. See Marza, V. D.
- Chiplonkar, V. T. See Dasannacharya, B.
- Chipman, J., application of thermodynamics to deoxidation of liquid steel, B., 457.
and Fontana, M. G., approximate equation for heat capacities at high temperatures, A., 289.
and Murphy, D. W., solubility of nitrogen in liquid iron, B., 1144.
See also Urban, S. F.
- Chippendale, H. G. See Davies, R. O.
- Chiris, A., verbena oil and angelica-root oil, B., 45.
- Chirnoagă, E., new indicators for argentometric titrations, A., 719. Titration of iodides in presence or absence of chlorides and bromides with starch iodide as indicator, A., 1336.
- Chiron, D., and Grischott, D., borophosphates of copper and lead (M^uBPO₆), A., 832.
- Chisholm, R. A. E. See Thomas, W. H.
- Chistoni, A., and Foresti, B., sodium tetrathionate as an antidote to hydrocyanic acid poisoning, A., 398.
- Chistovich, P. S. See Khudyakova, L. D.
- Chistyakov, F., preparation of barium aluminate for production of alumina (Kuznetsov-Shukovski process), B., 20.
- Chistyakov, F. M., action of carbon dioxide on putrefactive micro-organisms, A., 256.
- Chittenden, F. D., and Revere Rubber Co., hard rubber dust, (P.), B., 418.
- Chitun, A. M., See Adadurov, I. E., and Gernet, D. V.
- Chivers & Sons, Ltd., Rendle, T., and Bolton, E. W., table jellies, (P.), B., 123.
- Chiverton, A. H. See F. M. Ltd.
- Chlebnikov, N. I., Solun, A. S., and Danilova, A. K., determination of digestibility of protein in the mixed excreta of fowls, A., 380.
See also Solun, A. S.
- Chledowski, L. See Weiss, R.
- Chlopin, N. J., determination of chromium in tungsten steels, B., 63. Rapid electrometric determination of manganese in tungsten steel, B., 64.
- Chlopin, V. G., and Samartseva, A. G., polonium. I. Compounds of bivalent polonium, A., 593.
- Chloride Electrical Storage Co., Ltd., electric accumulators, (P.), B., 237.
and Acreman, H. F., hydrometers, (P.), B., 482.
- Chloupek, J., decomposition of permanganic acid in certain acid media; thermal decomposition of manganese carbonate, and its products, A., 1090. Action of soft X-rays on glass, B., 591.
- Chmelař, E., and Mostovoj, K., differentiation of strains of clovers and soya beans by the luminescence of germinated seeds, A., 671.
- Chmelevskaja, N. A. See Tarasov, T. J.
- Chmelnitzkaja, I., and Verchovskaja, I., structure of sulphur-black. II., A., 1384.
- Chmielewski, T. See Wierzychowski, M.
- Chmura, M. I., characteristics of *Nicotiana* species, A., 1549.
- Cho, S., blood-sugar of opium addicts, A., 246.
- Chochlova, E. G. See Zelinski, N. D.
- Chodát, F., antityrosinase function of glutathione *in vitro*, A., 1537.
and Mirimanoff, A., preservation and the rate of respiration of yeasts, A., 1538.
and Raad, M., variation in the buffering power of the culture fluid during bacteriolysis, A., 1542.
See also Briner, E.
- Chofré, E. M., mechanical analysis of soil, B., 243.
- Choi, C. Y., blood-calcium after injections of blood-serum of parathyroidectomized animals, A., 880. Relationship between anaphylaxis and magnesium chloride, A., 1160.
- Cholak, J., spectrographic determination of lead in urine, A., 399. Spectrographic determination of lead in biological material, A., 1552.
- Cholnoky, L. von, use of fractional adsorption in isolating natural organic compounds, B., 12.
See also Zechmeister, L.
- Cholodny, N., germination hormone in *Gramineae*, A., 905.
- Chomse, H. See Tiede, E.
- Chomutov, A. M., polymerisation of perilla oil, B., 318.
- Chopin, M. J. E., testing of materials having plastic or fermentative properties, (P.), B., 700.
- Chopra, G. S. See Chopra, R. N.
- Chopra, R. N., Chowhan, J. S., and Lal, S., biological assay of digitalis preparations in the tropics. V. Potency of lanadigin (glucoside of *D. lanata*) and its relation to the standard powder (B.P. 1932), A., 1158.
and Ghosh, S., some common [Indian] indigenous remedies, A., 1157.
Ghosh, S., and Dutt, A., some inorganic preparations of Indian indigenous medicine. I. *Abhra bhasma*, B., 828.
and Mukherji, S. N., changes in physical and chemical characteristics of blood sera of opium addicts, A., 246.
Mukherji, S. N., and Chopra, G. S., protein fractions of blood sera. II. Blood sera of opium addicts, A., 1394.
Mukherji, S. N., and Sen, B., protein fractions of blood sera. III. Malarial sera during and after the rigour stage, A., 1394.
- Choraży, M., rational analysis of Polish coal, B., 130. Characteristics of caking and non-caking coals, B., 130.
See also Swientoslowski, W.
- Chorine, V., flocculation of serum in distilled water or in presence of melanin, A., 508. Flocculation and "super-flocculation" in Henry's reaction, A., 1402.
and Prudhomme, R. O., significance of Vernes' resorcinol reaction in tuberculosis, A., 776.

- Chorlton, F. O. L., apparatus for straining and cooling fluids, (P.), B., 787. Filters, strainers, etc., (P.), B., 1026.
- Choron, Y. See Chevallier, A., and Malméjac, J.
- Chorunshenkov, S. I. See Grünberg, A. A.
- Chou, S. K. See Liu, S. H.
- Chou, T. P., and Adolph, W. H., copper metabolism in man, A., 393.
- Chou, T. Q., constituents of European *Datura stramonium* cultivated in China, A., 905. Alkaloids of *Mufang-chi*, A., 1433.
- and Chu, J. H., constituents of the Chinese drug *Hsi-hsin* (*Asarum sieboldii*, Miq.), A., 1433.
- See also Chen, K. K.
- Choubert, G. See Jouravsky, G.
- Chouke, K. S., Friedman, H., and Loeb, L., proliferative activity of the thyroid gland of the female guinea-pig during the sexual cycle, A., 1423.
- Chow, B. F., relation between the rates of reactions and oxidation-reduction potentials. I. Oxidation of formate ion by halogens in the dark. II. Oxidation of oxalate by halogens in the dark, A., 1207.
- Chow, J. See Chang, C. L.
- Chowdhury, J. C., and Peacock, D. H., resins of the latex of *Holarrena antidysenterica*, A., 1244.
- See also Peacock, D. H.
- Chowdhury, J. K., Chakraborty, A. C., and Majumder, A., polymerisation of unsaturated fatty acids, A., 1350.
- Chowhan, J. S. See Chopra, R. N.
- Chrenova, D. See Tiuljukov, A.
- Chrenova, Z. A. See Volshinski, I. A.
- Chrétien, A., and Genet, P., disodium orthoarsenate and its hydrates, A., 591.
- and Varga, G., two compounds of titanium tetrachloride and hydrogen chloride, A., 1461.
- and Weil, R., system water-potassium chloride-cupric chloride, A., 1323.
- Chrisman, I. See Finkelstein, I. S.
- Christ, J. See Standard-I.G. Co.
- Christ, R. E. See Hurd, C. D.
- Christensen, A. See Chem. Eng. Corp.
- Christensen, B. E. See Walker, I. F., and Williams, R. J.
- Christensen, C. J. See Bell Telephone Labs.
- Christensen, Carl W., Conquest, V., and Armour & Co., food product [animal feed], (P.), B., 252.
- Christensen, Chester W., and Rubber Service Labs. Co., vulcanisation of rubber, (P.), B., 1105.
- Christensen, E. F. See Gen. Electric Co.
- Christensen, E. H., and Dill, D. B., oxygen dissociation curves of the blood of birds, A., 770.
- See also Keys, A. B.
- Christensen, E. V., and Strayberg, J., aluminium subacetate solution, A., 313.
- Christensen, J. J., and Stakman, E. C., relation of *Fusarium* and *Helminthosporium* in barley seed to seedling blight and yield, B., 690.
- Christensen, L. M., and Fulmer, E. I., analysis of *n*-butyl alcohol, acetone, and ethyl alcohol in aqueous solution, B., 617.
- See also Fulmer, E. I.
- Christensen, N. C., treatment of solids with gaseous media, (P.), B., 1076.
- Christensen, V. E., determination of smelter gas volumes and dust losses, B., 996.
- Christian, P., fertilisers, (P.), B., 168.
- Christian, S. M. See Jones, G.
- Christian, W. See Warburg, O.
- Christian, W. T. See Bales, C. E.
- Christiani, A. von, chemistry of carcinoma. I., A., 1525.
- Christiansen, D. M., production of nutrient materials, (P.), B., 748.
- Christiansen, J. A., application of Bodenstein's method of stationary concentrations of intermediate products in reaction kinetics, A., 707.
- and Asmussen, R. W., magneto-chemical investigations. I. Complex rhodium compounds, A., 573.
- Christiansen, W. G., and Braker, W., dialkylaminoalkyl esters of dialkylaminoalkoxy-3-carboxydiphenyls; [anaesthetics], (P.), B., 878.
- Harris, S. E., and Squibb & Sons, E. R., mercurated isatin derivatives, (P.), B., 206. Isatin derivatives, (P.), B., 444.
- Harvey, A. W., and Squibb & Sons, E. R., 3-carboxy-4-alkoxydiphenyl and salts thereof, (P.), B., 701. 4-Nitro-3-carboxy-4-alkoxydiphenyl, (P.), B., 701. 3-Carboxy-[2-alkoxydiphenyl], (P.), B., 701. Amino-derivative[s] of carboxy-alkoxydiphenyls, (P.), B., 701. Dialkylaminoalkyl esters of hydroxy-3-carboxy-, and alkoxy-carboxy-diphenyls [anaesthetics], (P.), B., 878. Aminoalkyl esters of the carboxyalkoxyaminodiphenyls [anaesthetics], (P.), B., 878.
- Jurist, A. E., and Squibb & Sons, E. R., antimony derivative of sulpharsphonamine, (P.), B., 206. Hypnotic preparation, (P.), B., 287.
- Moness, E., and Squibb & Sons, E. R., mercurated hydroxyaryl sulphides, (P.), B., 1119.
- Van Winkle, R., and Squibb & Sons, E. R., purification of ether, (P.), B., 715. Bromine-substituted allyl ester of 2-phenylquinoline-4-carboxylic acid [pharmaceutical], (P.), B., 750.
- See also Braker, W., Harris, S. E., Jones, W. S., Jurist, A. E., Lott, W. A., and Moness, E.
- Christiansen, W. N., Crabtree, R. W., and Laby, T. H., density of light water: ratio of deuterium to hydrogen in rain water, A., 815.
- Christie, E. W., McKenzie, A., and Ritchie, A., resolution of tertiary hydroxycarboxylic acids, A., 489.
- See also McKenzie, A.
- Christiernin, G., water-purification system in Borga, Finland, B., 527.
- Christin, P., and Chem. Eng. Corp., purification of gases for ammonia syntheses, (P.), B., 452.
- Christina, V., and Intravenous Products Co. of America, Inc., therapeutic calcium preparations, (P.), B., 1069.
- Christman, C. C. See Wolfmont, M. L.
- Christmann, L. J., and Amer. Cyanamid Co., [collector for] flotation of oxidised ores [e.g., lead or copper carbonate ores], (P.), B., 505. Flotation process and reagent [for copper carbonate ores], (P.), B., 837.
- Romieux, C. J., and Amer. Cyanamid Co., aliphatic acid antioxidants, (P.), B., 262.
- Christomanos, A. A., alcoholic hydrolysis of caseinogen and gelatin, A., 998.
- Christoph, W., absolute output of the Na D line by excitation by electron collision, A., 907. Counter tubes with alkali [metal] cathodes, A., 1341.
- Christopher, E. F., De Beukelaer, F. L., and Swift & Co., gluc, (P.), B., 115.
- and Industrial Patents Corp., [neutral casein] adhesive, (P.), B., 371.
- Christopher, F. E., crusher, (P.), B., 3.
- Christopoulos, T., and Konsta, A., hydrogenation of olive oil, B., 559.
- Chrysler Corporation. See Lee, R. K., and McCleary, F. E.
- Chrzaszcz, T., and Janicki, J., action of trypsin and amylokinase on amylase content of grains, A., 121. Presence of a kinase of amylase in trypsin preparations, A., 249. Rennin and diastatic power of ungerminated grains, A., 1024.
- and Peyros, E., optimal conditions for accumulation of citric acid and mechanism of citric acid formation [by moulds], A., 1540.
- and Resznetniak, J., sulphur compounds in spirits, B., 169. Amino-compounds, and the composition of the sediments in meters and alcohol reservoirs, B., 170.
- and Zakomorny, M., conversion of guanidine into urea by moulds, A., 254. Decomposition of formic to oxalic and carbonic acids by various moulds, A., 1166.
- Chu, C. M. See Tao, W. S.
- Chu, C. Y., Li, P. L., and Yang, C. S., presence of carotene in ovarian tumours, A., 1400.
- Chu, H. I. See Liu, S. H.
- Chu, J. H. See Bachmann, W. E., and Chou, T. Q.
- Chu, P. E. See Hance, F. E.
- Chu, T. C. See Woo, S. C.
- Chu, T. T., degradations in the brucine series, A., 874.
- Chuang, C. K., and Han, C. T., condensation of butadiene with alkylbenzoquinones, A., 863.
- and Ma, C. M., syntheses with cyclic ketonic esters. II. Synthesis of cyclohexane-1:2-diacetic acid and related compounds, A., 859. Condensation of oxalic esters with β -methyltricarballic ester, A., 861.
- Ma, C. M., and Tien, Y. L., 8-methylhydrindane derivatives and *cis*- and *trans*-2-methylcyclopentane-1-carboxylic-2-acetic acid, A., 1495.
- Tien, Y. L., and Huang, Y. T., syntheses with cyclic ketonic esters. I. Synthesis of 1-methylcyclohexane-2-acetic-1-carboxylic acid and related compounds, A., 859.
- Chubb, M. F., and Harner, H. R., effect of temperature and rate of discharge on capacity of lead-acid storage batteries, B., 1052.
- See also Harner, H. R.
- Chuc, R. See Giroud, A.
- Chudjakov, A. S. See Godnev, I., and Pamfilov, A. V.
- Chudjakov, I., and Gubarev, E., fodder value of *Poa bulbosa*, var. *vivipara*, Koeller, B., 971.
- Chufarovski, V. N. See Rapoport, I. B.
- Chugunov. See under Tschugunov.
- Chuinard, F. G. See Manville, I. A.
- Chustov, V., seed-flax straw in Ukraine as raw material for the paper industry, B., 222.
- Chung-Ming, P., system water-sodium pentaborate-sodium chloride, A., 934.
- See also Rollet, A. P.

- Church, C. F., functional studies of the nervous system in experimental beri-beri, A., 1429.
- Church, C. G., composition of juice of oranges from girdled and normal trees, A., 266.
- and Sorber, D. G., chemical composition of the loquat (*Eriobotrya japonica*), A., 1180.
- Churchill, D., jun. See Standard-I.G. Co.
- Churchill, L. R., and Tide Water Oil Co., lubricating compound, (P.), B., 760.
- Churchill, R. L. See Eastman Kodak Co.
- Chvat, M. B. See Aronov, S. G.
- Chvostikov, I. A., fluorescence of platino-cyanide solutions, A., 147.
- See also Lebedev, A. A.
- Chwala, A. See Waldmann, E.
- Ciaravino, E., toxicity of carbon tetrachloride, A., 1533.
- Cicala, G., biochemistry of burns. I. Blood- and urine-chloride and non-coagulable nitrogen. II. Creatinine. III. Blood-purines. IV. Oxidation-reduction activity of blood, A., 1400.
- Ciechocki, T., determination of chromium and nickel in ferrous alloys containing manganese and more than 1% of carbon, B., 499.
- Ciferri, R., and Redaelli, P., *Coccidioides immitis*, Stiles. IV. and V. Cultural, biochemical, pathogenic, and micromorphological characteristics *in vivo* and *in vitro* of typical and degraded strains, A., 536.
- Cimernan, C., and Wenger, P., micro-determination of zinc with anthranilic acid, A., 1094, 1473.
- See also Wenger, P.
- Cimmino, A. See Mazza, F. P.
- Cinder Chrome Co. See Hede, A.
- Ciunéide, R. O., 2,4-derivatives of thiophen, A., 1248.
- Ciocea, B., and Semproni, A., esterification of hydroxy-acids and polyhydric alcohols, A., 1223.
- Cioglia, L., and Tore, D., anterior pituitary gonadotropic hormones and blood-cholesterol, A., 667. Luteinising hormone and cholesterolemia, A., 1174.
- See also Artom, C.
- Cionga, E., presence of 2-acetylpyrrole in stabilised official valerian, A., 551.
- Cirelli, (Signa) V. See Monti, (Signa) L.
- Cirulis, A. See Fischer, W. M., and Straumanis, M.
- Cittert, P. H. van. See Burger, H. C., and OrNSTein, L. S.
- City Auto Stamping Co., electrolyte for electroplating [with copper-tin alloys], (P.), B., 557.
- Ciulla, U. See Guercio, F.
- Ciusa, R., and Bellino, F., substances analogous to graphite. IV., A., 1333.
- Persian [indigo] dyestuffs, B., 444.
- and Ottolino, G., basic properties of hydrazones. IX., A., 1367.
- Ciusa, W. See Testoni, G.
- Claassen, H., metabolism, respiration, and gaseous exchange in yeast cells during growth of yeast by the aëration method, A., 405. Ammonia and carbon dioxide content of regenerating steam and condensate [from sugar evaporators], B., 39. Yeast growth and maximum yields of yeast theoretically and practically obtainable from sugar solutions, B., 40. Reactions in preparation of yeast by the aëration method, B., 120. Molasses or wood sugar for preparation of bakers' yeast, B., 518.
- Claassen, H., economics of production of wood sugar and of spirit and fodder yeast therefrom, B., 648. Sulphurous acid in beet molasses, B., 692. Feed-water in the sugar factory, its behaviour in the boiler and its treatment, B., 743. Steam consumption in multi-stage evaporation plant in relation to system and quantity of [sugar] juice, B., 1159.
- Clamann, H. G., magnetic properties of animal fibrous tissues, A., 231.
- Clamer, G. H., development of submerged resistor induction furnace, B., 67.
- Clapham, P. A., effect of dietary deficiency on infestation of chickens with the nematode, *Heterakis gallinae*, A., 384.
- Clapp, A. L., agriculture [retaining moisture in fields], (P.), B., 423.
- Clapp, D. B. See Morton, A. A.
- Clapp, K. S., recovery of condensates, (P.), B., 788.
- Clapp, L. R., Farmer, R. O., and Rolling Process, Inc., [heat] treatment of metals [copper], (P.), B., 595.
- Clar, E. See Haurowitz, F.
- Clare, R. L., standardisation of tests for terra-cotta bodies and glazes, B., 406.
- Clarens, J., and Lacroix, J., soils. XIII. Action of alkali salts and calcium chloride on non-calcareous soils. XIV. Influence of ammonium salts on the acid functions of a soil; free alumina; alumina and silicic functions. XV. So-called colloidal complexes of soils, B., 371, 917.
- Clark, A., and Rodebush, W. H., OH²⁺ bands, A., 280.
- Clark, A. H., and Kirch, E., potassium guaiacolsulphonate, B., 973.
- Clark, A. J., individual variation in response to drugs, A., 1409.
- Gaddie, R., and Stewart, C. P., asphyxial arrest of the isolated frog's ventricle, A., 119.
- Clark, A. M. See Imperial Chem. Industries.
- Clark, A. N. See Woodall-Duckham (1920), Ltd.
- Clark, A. R. See Alty, T., and Wilhelm, J. O.
- Clark, Arthur R., test-tube method for flame testing, A., 1093.
- Clark, B. B., Gibson, R. B., and Paul, W. D., increased effectiveness of insulin when injected in equal doses at intervals of two to four hours. I. Use of insulin in divided doses in severe uncomplicated diabetes and in complicated medical cases, A., 1285.
- Clark, C. A. See Gnädinger, C. B.
- Clark, C. H. D., spectroscopy and valency. III. Periodic functions of non-hydride di-atoms, A., 432. Application of a modified Morse formula to simple hydride diatomic molecules (di-atoms), A., 569. Periodicity of Morse's function, A., 569. Constants for halogens and their gaseous diatomic compounds, A., 569. Spectroscopic constants of the di-atom PN, A., 679. Periodic groups of non-hydride di-atoms, A., 1057.
- and Stoves, J. L., suggested improvements of Morse's rule, A., 1448.
- Clark, C. L. See White, A. E.
- Clark, C. W. See Ahlberg, J. E., and Keesom, W. H.
- Clark, E. M. See Standard-I.G. Co.
- Clark, E. P., preparation of picrotoxin, A., 983. Determination of sulphur in organic compounds by the semimicro-Carius method, A., 1258.
- Clark, F. M. See Brit. Thomson-Houston Co., and Gen. Electric Co.
- Clark, G. C. H. See Howards & Sons.
- Clark, G. L., and Mrgudich, J. N., effect of rickets on structural characteristics of bone, A., 238.
- Parker, E. A., Schaad, J. A., and Warren, W. J., measurements of previously unknown large interplanar spacings in natural materials, A., 1195.
- Sterrett, R. R., and Leppla, P. W., X-ray diffraction studies of built-up films of long-chain compounds, A., 434.
- See also Schmitt, F. O.
- Clark, George L., and Beckwith, M. M., detection and evaluation of residual distortion in crystals, with special reference to electric steel, A., 1193.
- and Smith, H. A., occurrence of CuAl₂ in duralumin, B., 65.
- See also Chesters, J. H.
- Clark, (Miss) H. B. See Roberts, K. C.
- Clark, H. C. See Komp, W. H. W.
- Clark, H. E. See Davidson, O. W., and Vickery, H. B.
- Clark, H. N., [heat]-insulating cement, (P.), B., 853.
- Clark, J., and Read, John, new methods in stereochemistry. I. Preparation of *d*- and *l*-borneol. II. Resolution of *dl*-menthol, A., 89.
- Clark, J. A., rosins, viscose, etc., in finishing cotton cloths, B., 224.
- Clark, J. d'A., Kollegang beating method for pulp evaluation, B., 489. Determining the rigidity, stiffness, and softness of paper, B., 490.
- Graves, J. E., and Mead Corp., paper, (P.), B., 97.
- Clark, J. C., absolute probability of *K*-electron ionisation of silver by cathode rays, A., 1047.
- Clark, J. H. See Rowntree, L. G.
- Clark, J. Harokl, reaction of nutrient medium as affecting growth of strawberry plants, B., 422.
- Clark, L., treatment [cracking] of hydrocarbon materials, (P.), B., 1035.
- Clark, L. M., and Hunter, E., system CaCO₃-CaSO₄-H₂O at 159° to 252°, and the effect of additions of sodium salts, A., 583.
- and Hamer, P., rôle of sodium aluminate in water-softening. II. Effect of mixed solutions of calcium and magnesium salts, B., 480.
- and Cousins, W. R., rôle of sodium aluminate in water softening. III. Factors influencing capacity and efficiency of lime-sodium carbonate water-softening plants, B., 576.
- See also Bunn, C. W.
- Clark, L. T. See Seibert, F. B.
- Clark, P. H., and Robinson, E. L., automatic creep test furnace-guide, B., 410.
- Clark, R., and Waddington, A. H., modern aspects of water purification, B., 832.
- See also Waddington, A. H.
- Clark, R. E. D. See Palmer, W. G.
- Clark, R. H., and Edwards, H. I., effect of chemicals on amylase activity, A., 402.
- Moore, R. G. D., and McArthur, M., preparation of cinnamic acid and *o*-phenylphenol derivatives, A., 210.
- Clark, R. J., firing ceramic kilns, B., 270.

- Clark, S. J., and Young Accumulator Co., porous ebonite diaphragms for electric batteries etc., (P.), B., 777.
- Clark, W. J. See Imperial Chem. Industries.
- Clarke, A. F., apparatus for treating liquids and gases, (P.), B., 610.
- Clarke, B. L., and Hermance, H. W., rôle of analytical chemistry in industrial research. II. Microanalysis, A., 1091. Micro-analytical notes. I. Methods of dealing with small quantities of liquids and precipitates, A., 1476.
- Wooten, L. A., and Pottenger, C. H., determination of sulphur in ferromagnetic alloys, B., 854.
- Clarke, H. T., and Gurin, S., crystalline vitamin-B₁. XII. Sulphur-containing moiety, A., 1510.
- See also Blumenthal, D., Eastman Kodak Co., and Gurin, S.
- Clarke, J. W., Grady, J. H., and Grady Manufg. Co., using [rubber] latex [for coating fabric, leather, etc.], (P.), B., 738.
- Clarke, L. A. See Texas Co.
- Clarke, R. B. F. F. See Imperial Chem. Industries.
- Clarke, S. E. See Kirk, L. E.
- Clarke, S. G. See Macnaughtan, D. J.
- Clarke, S. H., application of microchemical tests in assessing the quality of ash timber, B., 675.
- Clarke, W. V. See Dunlop Rubber Co.
- Clarkson, R. G. See Du Pont de Nemours & Co., E. I.
- Clasen, A. See Houdremont, E.
- Clash, R. F., jun., and Beck, F. J., jun., directions of discontinuous changes in magnetisation in monocystal bars and discs of silicon-iron, A., 287.
- Classen, W., prevention of frothing in Arrdt's determination of nitrogen, A., 1476.
- Claude, Albert, properties of the causative agent of a chicken tumour. X. Chemical properties of chicken tumour extracts. XI. Composition of extracts containing the active principle, A., 885.
- Claude, André, krypton- and xenon-filled incandescence [electric] lamps, B., 731.
- Claus, G. See Heertjes, P. M.
- Claus, W., system copper-lead, A., 23.
- and Brandus, E., deoxidation of non-ferrous metals, (P.), B., 1031.
- See also Guertler, W.
- Claus, W. D. See Jauncey, G. E. M.
- Clausen, calculation of the efficiency of the principal [plant] nutrients, B., 918.
- Clausen, V., influence of adrenaline, pituitrin, and ephetonin on absorption of insulin, A., 901.
- Clavel, J. See Sédallian, P.
- Clavera, J. M., and Martin, F. M., micro-determination of lactose, A., 639.
- Clawson, A. B., Bunyea, H., and Couch, J. F., remedies for cyanide poisoning in sheep and cattle, A., 530.
- See also Bunyea, H., and Couch, J. F.
- Claxton, G. See Hoffer, W. H.
- Clay, J., ionisation of a gas at different pressures by photon and corpuscular radiation, A., 1185. Nature of cosmic rays, A., 1187.
- and Clay, P. H., transformations of cosmic radiation in matter, A., 911.
- and Woltjer, H. R., diurnal variation of cosmic rays, A., 911.
- Clay, P. H. See Clay, J.
- Clay, R. E., use of lithium for an X-ray window, A., 57.
- See also Müller, A.
- Clay Reduction Co. See Svendsen, S. S.
- Clayton, B., Kerrick, W. B., Stradt, H. M., and Refining, Inc., powdered soap of low moisture content, (P.), B., 416.
- Tharman, B. H., Thomas, A. W., and Mattikow, M., oil-proofing of [fibrous] material and product therefor, (P.), B., 511.
- Clayton, E. E., new factor in epidemology of tobacco leaf diseases, B., 567.
- Clayton, H., and Jones, H., coloured moulding compositions, (P.), B., 195.
- Clayton, J. S., and Larmour, R. K., comparative colour test for coumarin and melilotic acid in *Melilotus* species, A., 1435.
- See also Larmour, R. K.
- Clayton, W. See Crosse & Blackwell, Ltd.
- Clayton Son & Co., Ltd., and Sowden, W., regeneration or purification of wash oil used in recovery of crude benzol and similar hydrocarbons from coal gas, (P.), B., 180.
- Cleary, E. J., high- and low-temperature [sludge] digestion experiments. II. Consecutive digestion, B., 1120.
- Cleary, J. P., Beard, P. J., and Clifton, C. E., factors influencing size of bacterial populations, A., 662.
- See also Clifton, C. E.
- Cleave, van. See under Van Cleave.
- Clegg, (Miss) H. See Speakman, J. B.
- Clegg, J. H. See Stanworth, S.
- Cleghorn, R. A., and Jendrassik, L., photometric determination of nitrogen, A., 134.
- Clement, J. See Rabaté, S. G.
- Clément, L., and Rivière, C., separation and fractional extraction of cellulose acetates, A., 70.
- Rivière, C., and Hennelaitre, A., solubility rules for cellulose derivatives; cellulose acetate and benzylcellulose, A., 822. Methods of testing and control in paint and varnish industry, B., 194.
- See also Beck, A.
- Clement, L. D., actively antiseptic fabrics, B., 721.
- Clément, R. See Lesné, E.
- Clement, W. L., concentration of fruit juices, (P.), B., 380.
- Clemente, A. See Medina, F. A.
- Clementi, A., apparatus for observation of reactions at liquid interfaces, A., 58.
- and Torrisi, D., action of lupanine and of infusion of *Lupinus albus* seeds on blood-sugar, and on diabetic glycosuria and hyperglycemia, A., 527.
- Clements, A. R. See Pay, A.
- Clements, F. E., and Long, F. L., elongation and expansion [of plants] under reduced light intensity, A., 264.
- Clements, J. H., absorption spectrum of sulphur dioxide, A., 427. Temperature variation method to assist in vibrational analyses of complex molecular spectra, A., 427.
- Clementson, C. M. See under Clementson, C. & S.
- Clementson, S. O. H. See under Clementson, C. & S.
- Clementson, C. & S., lubricants with corrosion-inhibiting properties, (P.), B., 1034.
- Clemmensen, E., Miller, R. M., and Monsanto Chem. Co., organic [dicarboxylic] acid chlorides, (P.), B., 762.
- and Monsanto Chem. Co., organic esters of thiophosphoric acid, (P.), B., 1132.
- Clemmer, H. F., integral use of calcium chloride to supply high early strength [to concrete], B., 407.
- Clemmer, J. B., and O'Meara, R. G., flotation and depression of non-sulphides: calcite, silica and silicates, fluorspar, barite, apatite, and tungsten minerals, B., 104.
- See also Coghill, W. H., De Vaney, F. D., and Diener, F. P.
- Clemmesen, J. See Krobs, C.
- Clemons, G. R., and Dickenson, H. G., action of selenium on compounds containing angular methyl groups, A., 968.
- and Holmes, T., synthesis of pyridylpyrazoles, A., 96.
- and Macdonald, J. M., formaldehyde method of detecting the vinyl group, A., 1390.
- and McIlwain, H., new phenazino synthesis; phenazhydrins. I., A., 224. Photosynthetic organisms, A., 406. Syntheses and molecular complexes in the phenazine series. II., A., 991.
- and McQuillen, A., hexadeuterobenzene. I., A., 967. Micropyknometer method for density determinations, A., 1218, 1342. Octadeuteronaphthalene, A., 1358.
- and Raper, R., alkaloids of *Ulex europaeus*. I., A., 365.
- Clenshaw, W. J. See Gough, H. J.
- Clensol, Ltd. See Piper, W. H.
- Cléret, F. See Debré, R.
- Clerget, P. See Aubert, M.
- Cleveland, C. K., recent developments in oil sprays. II., B., 326.
- See also Standard Oil Co.
- Cleveland Paint & Varnish Production Club, testing chemical resistance of protective coatings, B., 33.
- Clever, A. See Hertel, E.
- Clewell, D. H., and Wulff, J., reflecting power of aluminium and its alloys in different regions, A., 154.
- Clews, C. J. B., electrical conductivity of strong electrolytes and its variation with temperature, A., 37. Electrical conductivity of some strong electrolytes in dilute solution and its variation over the temperature range 18—85°, A., 1324.
- See also Robinson, H. R.
- Clews, F. H., Green, A., and Green, A. T., action of alkalis on refractory materials. I. Action of potash vapour on refractory materials at 900° and 1000°, B., 1094.
- and Green, A. T., permeability of refractory materials to gases. IV. Influence of firing process on permeability to air of fireclay materials, B., 188. Alkalis and refractory materials, B., 1094.

- Clickner, F. H., and Kraft-Phenix Cheese Corp., concentrated milk constituents, (P.), B., 380. Transparent [waterproof wrapping] sheets or coatings, (P.), B., 624.
- Clifcorn, L. E., Meloche, F. W., and Elvehjem, C. A., absorption of carbon monoxide with reduced haematin and pyridine-haemochromogen, A., 1517.
- See also Griem, W. B.
- Clifford, A. T., and Cameron, F. K., dark-field study of fibres, B., 15.
- Clifford, C. See Moore, B. J.
- Clifford, I. L. See Bunn, C. W.
- Clifford, P. A. See Wichman, H. J.
- Clifford, W. M., effect of halogen salts on clotting of milk by trypsin, A., 785.
- Clifton, C. E., and Cleary, J. P., oxidation-reduction potentials and ferrieyanide-reducing activities; in glucose-peptone cultures and suspensions of *Escherichia coli*, A., 536.
- Cleary, J. P., and Beard, P. J., oxidation-reduction potentials and ferrieyanide-reducing activities; in peptone cultures and suspensions of *Escherichia coli*, A., 536.
- See also Cleary, J. P.
- Cline, I. R. See Butterworth, F. W.
- Cline, J. K., and Merck & Co., Inc., acyl-choline esters and their salts, (P.), B., 287.
- Cline, R. C. See Standard-I.G. Co.
- Cloer, V. U. See Sims, W. F.
- Cloke, J. B. See Gotkis, D., Knowles, E. C., and Murray, J. V.
- Close, R. E., preparing and stabilising electroplating solutions, and apparatus therefor, (P.), B., 107.
- Clough, G. W., boron poisoning in dogs, A., 1413. Poisoning of animals by cyanides present in some industrial effluents, B., 1072.
- Clouse, R. C., effect of grape as compared with other fruit juices on urinary acidity and excretion of organic acids, A., 1524.
- Clow, S. C. See Rothgarn, A. E.
- Cloves, G. H. A. See Krahli, M. E.
- Clucas, A. H., leakage in horizontal gas retorts, B., 341.
- Clusius, K., two demonstration experiments with liquid hydrogen, A., 189. Difference in vapour pressure between ortho and para forms of hydrogen isotopes, A., 925.
- and Bartholomé, E., properties of condensed heavy hydrogen, A., 155. Rotational heat of the molecule H^2H^2 , A., 573. Rotational heat of orthodeuterium, A., 924. Difference in inner pressure of the condensed hydrogen isotopes, A., 1187.
- and Perlick, A., inner equilibrium in solid phases, A., 16.
- See also Bartholomé, E.
- Clutterbuck, P. W., Raistrick, H., and Reuter, F., biochemistry of micro-organisms. XII. Metabolic products of *Penicillium Charlesii*, G. Smith. II. Molecular constitution of carolic and carolinic acids. XLIII. Metabolic products of *Penicillium Charlesii*, G. Smith. III. Molecular constitution of carlic and carlosic acids. XLV. Metabolic products of *Penicillium Charlesii*, G. Smith. IV. γ -Methyltetronic acid; formation and structure of ramigenic and verticillic acids, A., 327, 662, 898.
- and Reuter, F., reaction of periodic acid with α -ketols, α -diketones, and α -ketonealdehydes, A., 1483.
- Cluzeau, B., physical development after iodisation, B., 574.
- Clyne, R. W. See McAdam, D. J., jun.
- Cmyral, H., separation of arsenic and antimony from complex sulphur compounds of copper, (P.), B., 414.
- Coalson, D. See Salter, C. S.
- Coase, S. A., detection of small quantities of germanium in presence of arsenic, A., 56.
- Coast Insulating Co. See Smith, H. C.
- Coates, A. C. See Brit. Aluminium Co.
- Coates, W. M., and Sloan, D. H., high-velocity mercury ions, A., 5.
- Cobb, A. W., and Gilbert, E. C., hydrazine: heat capacities of aqueous hydrazone salts at 20° and 25°, A., 303.
- See also Gilbert, E. C.
- Cobb, D. M. See Fenn, W. O.
- Cobb, H. L., and Boonton Res Corp., magnetic material [dust cores], (P.), B., 275.
- See also Engle, E. W.
- Cobb, J. F., dry kiln [for timber], (P.), B., 951.
- Cobb, R. M., sizing [of paper] and capillary flow, B., 490.
- Coberly, C. J., and Kobe, Inc., heat treatment of steel, (P.), B., 234.
- Coblentz, W. W., and Stair, R., ultra-violet transmission changes in glass as a function of the wave-length of the radiation stimulus, A., 279. Factors affecting ultra-violet solar radiation intensities, A., 1298.
- Cobler, H. See Butenandt, A.
- Cochran, F. J. See Barbour, H. G.
- Cochran, P. B. See Du Pont de Nemours & Co., E. I.
- Cochran, W. G., influence of rainfall on yield of cereals in relation to manurial treatment, B., 1158.
- Cockburn, A. M., geology of St. Kilda, A., 1479.
- Cockcroft, J. D., Gilbert, C. W., and Walton, E. T. S., experiments with high-velocity positive ions. IV. Production of induced radioactivity by high-velocity protons and deuterons, A., 276.
- Cocking, T. T., and Crews, S. K., fluorescence test for olive oils, B., 194.
- Cockram, C. See Imperial Chem. Industries.
- Cocksedge, H. E. See Imperial Chem. Industries.
- Codareea, L., determination of the f.p. of crude petroleum and paraffin-containing mazouts, B., 391.
- Codounis, A. See Achard, C.
- Cody, J. J. See Waltman, B. B.
- Coe, H. S., [pulp] density controlling apparatus, (P.), B., 51.
- Coe, M. R., manufacture, composition, and utilisation of dairy by-products for [animal] feed, B., 332.
- and Leclerc, J. A., photochemical studies of rancidity; antioxidants versus green-light protection, B., 1101.
- Coeur, A. See Mouriquand, G.
- Coey, S. C., cooling towers, (P.), B., 929.
- Coffey, D. H., Heilbron, I. M., Spring, F. S., and Wright, H. R., sterol group. XX. Partial reduction of fucosterol, A., 1235.
- Coffin, C. C., student's gas-density balance, A., 723.
- Coffin, J. R. See Standard Oil Development Co.
- Coffman, D. D., acetylene polymerides and their derivatives. XXII. α -Di-alkylaminomethyl- β -vinylacetylenes. XXIII. 8-Cyano-4 α -butadiene [4 α pentadienonitrile], A., 1480.
- See also Du Pont de Nemours & Co., E. I.
- Cogan, M. See Gault, H.
- Coghill, W. H., De Vaney, F. D., Clemmer, J. B., and Cooke, S. R. B., concentration of potash ores of Carlsbad, New Mexico, by ore-dressing methods, B., 627.
- Cohen, A., synthesis of compounds related to the sterols, bile acids, and oestrus-producing hormones. V. Synthesis of conjugated arylhexadienes, and their behaviour in the Diels-Alder reaction, A., 752.
- Cook, James Wilfred, and Hewett, C. L., synthesis of compounds related to the sterols, bile acids, and oestrus-producing hormones. VI. Experimental evidence of the complete structure of oestrin, equilin, and equilenin, A., 752.
- Cohen, C., alga control and reference, B., 832.
- Cohen, E., and Bredée, H. L., velocity of oxidation of tin, A., 587.
- Cohen-de Meester, W. A. T., and Lieshout, A. K. W. A. van, influence of mechanical deformation on the transformation velocity of polymorphic metals, A., 688. Rate of polymorphic transformations. III. Influence of mechanical deformation on rate of transformation, A., 918.
- and Lieshout, A. K. W. A. van, rate of polymorphic transformations. I. Tin plague. II, A., 688. Physico-chemical studies on tin. X. Transition temperature grey tin \rightleftharpoons white tin, A., 688.
- and Piepenbroek, K., accurate quantitative analysis of chlorides in presence of thiocyanates, A., 183.
- Cohen, F. H., simple apparatus for objective fluorescence measurements using a selenium cell, A., 466. Determination of vitamin-B₂ by measurement of fluorescence, A., 1035. Substance with a blue fluorescence from carrots, A., 1180.
- and Wibaut, J. P., kinetics of the nitration of benzene, A., 828.
- Cohen, H., protein from sugar-beet pulps, B., 428.
- Cohen, M. U., precision lattice constants from X-ray powder photographs, A., 598.
- Cohen, (Mlle.) R. See Bobtelski, M.
- Cohen, S. See Goldring, W.
- Cohen, S. L., and Marrian, G. F., hydrolysis of combined forms of oestrone and oestriol in human pregnancy urine, A., 1034.
- See also Marrian, G. F.
- Cohen, V. L., rapid standardisation of protein extracts by determining the nitrogen content, A., 422.
- Cohen, W. E., chemistry of Australian timbers. IV. Lignin determination. II, B., 357. Chemical investigation of *Pinus radiata* in relation to its paper-making qualities. I. Distribution and nature of non-volatile ether extractives, B., 489. Identification of wood by chemical means. II. Alkalinity of ash and some simple chemical tests for identification of the coloured woods of the genus *Eucalyptus*, B., 592.
- Cohen-de Meester, W. A. T. See Cohen, E.

- Cohn, E. J., McMeekin, T. L., Edsall, J. T., and Weare, J. H., physical chemistry of amino-acids, peptides, and related substances. II. Solubility of α -amino-acids in water and in alcohol-water mixtures, A., 26.
See also England, A., jun., Greenstein, J. P., McMeekin, T. L., and Straup, D.
- Cohn, E. W., and White, Abraham, enzymic hydrolysis of raw and heat-treated egg-white, A., 784.
- Cohn, G., electrical conductivity of rust, A., 1303.
- Cohn, Henryk, and Siebert, C., metal albumin tannin ester compounds readily soluble in water, (P.), B., 287.
- Cohn, Hugo. See Non-Poisonous Gas Holding Co.
- Cohn, M. M., combined collection and disposal of sewage and food wastes, B., 430.
- Cohn, O. J. See Soskin, S.
- Cohn, R. J. See Green, A. A.
- Cohn, W. M., X-ray investigations at high pressures, A., 151. Viscosity determinations at high temperatures by means of freely falling spheres, A., 321. Crystal modifications of zirconia; clear, fused zirconia produced in the sun furnace, B., 1044.
- Coile, H. D. See Reynolds, H.
- Colange, G. See Lepape, A.
- Colani, A., separation of nickel and cobalt by means of alkali phosphates, A., 187. Double salts formed by lead chloride and bromide, A., 592.
- Colas, R., microscopical examination of phosphoric cast iron by the Stead-Kunkle method, B., 358.
- Colazzo, J. A., Torres, I., and Sanchez-Rodriguez, vitamin-A and cholesterol metabolism, A., 1034.
- Colbert, G. F., Colbert, W. H., and Liberty Mirror Works, [silver] mirror, (P.), B., 107.
- Colbert, W. H. See Colbert, G. F.
- Colburn, A. P., heat transfer involving turbulent fluids, B., 881.
and Hougren, O. A., design of cooler condensers for mixtures of vapours with non-condensing gases, B., 577.
See also Chilton, T. H.
- Colby, H. L., stock-scion chemistry and the fruiting relationships in apple trees, A., 1547.
- Colby, H. S., Karlsson, P. H., and Air Preheater Corp., [purifying hot gases by] heat exchange, (P.), B., 533.
- Colby, M. Y., and LaCoste, L. J. B., crystal structure of witherite, A., 571.
- Colby, W. F., isotope effect in acetylene, A., 562.
- Colby, W. G. See Sprague, H. B.
- Cold Metal Process Co. See Goss, A. P.
- Cole, A. E., effect of industrial (pulp and paper mill) wastes on fish, B., 928.
- Cole, C. E. See Read, F. M.
- Cole, D., dual-fed mill, (P.), B., 1026. Crusher, (P.), B., 1026.
- Cole, D. L. See Miller, F. W.
- Cole, H. H., and Hart, G. H., gonadotropic substances in mare's serum, A., 1544.
and Saunders, F. J., concentration of gonad-stimulating hormone in blood-serum and of oestrin in urine throughout pregnancy in the mare, A., 1426.
- Cole, H. S., jun., and Cox, E. R., recovery of gasoline from natural gas, (P.), B., 486.
See also Texas Co.
- Cole, J. E. See Du Pont de Nemours & Co., E. I.
- Cole, M. J. S., manuring of soils in dry climates, B., 515.
- Cole, P. J. See Barrett Co.
- Cole, S. S., working properties of silica mortars, B., 408. Conversion of quartz into cristobalite below 1000°, and some properties of the cristobalite formed, B., 629.
- Scholes, S. R., and Amberg, C. R., system $\text{Na}_2\text{O}-\text{B}_2\text{O}_3$. II. Properties of anhydrous and hydrated metaborates of sodium and potassium, A., 434.
and Taylor, N. W., system $\text{Na}_2\text{O}-\text{B}_2\text{O}_3$. I. Preparation of crystalline B_2O_3 and some of its physical properties. IV. Vapour pressures of boric oxides, sodium metaborate, and sodium diborate between 1150° and 1400°, A., 434, 574.
Taylor, N. W., and Scholes, S. R., system $\text{Na}_2\text{O}-\text{B}_2\text{O}_3$. III. Optical properties, X-ray patterns, and m.p. of the anhydrous sodium borates, A., 574.
See also Dickens, D. A.
- Cole, S. W., relative food values of glucose and sucrose, A., 654.
- Cole, V. V., Dunn, R. H., and Curtis, G. M., intrapulmonic absorption of iodine, A., 657.
See also Davis, C. B.
- Cole, W. See Julian, P. L.
- Cole, W. H. See Womack, N. A.
- Colefax, A. N. See Dakin, W. J.
- Colegrave, E. B., micro-extraction apparatus, A., 600.
- Coleman, Frank F., and Egerton, A., vapour pressures of magnesium, thallium, and zinc, and the determination of their chemical constants, A., 815.
- Coleman, Fred F., report of seeds, stock-foods, fertilisers, and pest-destroyers investigation branch, B., 1157.
- Coleman, G. H., Buchanan, (Miss) M. A., and Paul, P. T., disaccharides in "hydrol," A., 964.
and Waugh, G. P., reactions of diphenyl-ethylencimines and attempts to prepare aminoethenes, A., 1378.
- Yager, C. B., and Soroos, H., preparation of dibromoamine and its reactions with Grignard reagents, A., 1334.
See also Dow Chem. Co.
- Coleman, J. H., and Warner Chem. Co., disodium phosphate, (P.), B., 899.
- Coleman, J. M., and Ruprecht, R. W., effect of fertilisers and soil types on mineral composition of vegetables, B., 471.
See also Leukel, W. A.
- Coleman, J. P. D., and Wild-Barfield Electric Furnaces, Ltd., annealing or other heat-treating chambers, (P.), B., 637.
- Coleman, R. L., investment [composition], (P.), B., 409.
- Coles, G. H. N., and Allen & Co., Ltd., E., [gyratory] crushers, (P.), B., 50.
- Coles, W. V. See Spence & Sons, Ltd., P.
- Colgate-Palmolive-Peet Co., soap, (P.), B., 319.
- Colin, H., starch of the *Floridæ*, A., 133. Pectins [in beetroots], their nature, detection, and determination, B., 648. Pectic matters in the sugar beet and in sugar juices, B., 1063.
and Belval, H., levosins in grain and meal, A., 1290. Sugars of flour and dough, B., 746.
- Colin, H., and Bougy, E., sugar, ash, nitrogen, and phosphorus of forage and of sugar beetroots, and of their hybrids, A., 551.
and Chaudun, A., enzymic hydrolysis *in situ* of intracellular tissue, A., 1162.
- Colla, C. See Ferrari, A.
- Collard, E., adulteration of cocaine, B., 253.
- Collari, N., determination of small amounts of chromium in steel, B., 151.
- Collatz, H., enzymic hydrolysis of dihydroxyacetonephosphoric acid, A., 1026.
- Collazo, J. A., and Barbudo, J., lactic acid and glucose in the blood during Addison's disease as influenced by cortical hormone, A., 650.
- Puyal, J., and Torres, I., adrenal cortex hormone influencing carbohydrate metabolism; "cortormone," glucose, and lactic acid in blood of rabbits, A., 665.
and Ruiz, A. S., action of liver extract on blood-calcium and -phosphorus, A., 537.
- Collesano, G. See Giacalone, A.
- Collett, A. R. See Ashburn, H. V.
- Collie, B. See Moilliet, J. L.
- Collie, C. H., Griffiths, J. H. E., and Szilard, L., collisions between neutrons and dipions, A., 802.
- Collier, D., determination of tannin in wines, B., 695.
- Collier, W. A. See Neufeld, F.
- Colling, A. S., cements; [adhesives], (P.), B., 917.
- Collings, W. R. See Dow Chem. Co.
- Collins, A. M. See Du Pont de Nemours & Co., E. I.
- Collins, D. H., anemia in the chronic rheumatic diseases, A., 1268.
- Collins, E. V., jun. See Landon, N. R.
- Collins, F. J. E., acids of Chinese and esparto grass waxes and the hydrocarbons of esparto and candleilla waxes, A., 551.
- Collins, G. B., and Price, W. C., source of the Lyman continuum for use with spectrographs of high dispersion, A., 188. Absorption of oxygen in the extreme ultraviolet, A., 1437.
- Collins, J. F., jun. See Kemp, L. C., jun.
- Collins, J. M., and Moore Drop Forging Co., method of uniting metals, (P.), B., 811.
- Collins, R. B., photographic printing process and apparatus therefor, (P.), B., 1119.
- Collins, S. C., heat of vaporisation of a pure substance from measurement of temperature at two points and the vertical distance between them, A., 436.
- Collins, W. H., life-history of the Sudbury nickel irruptive. I. Petrogenesis, A., 602.
- Collip, J. B., and Anderson, E. M., thyrotropic hormone of the anterior pituitary, A., 1283.
- Browne, J. S. L., and Thomson, D. L., emmenin, A., 259.
- Pugsley, L. I., Selye, H., and Thomson, D. L., mechanism of parathyroid hormone action, A., 1423.
See also Bachman, C., Black, P. T., and Selye, H.
- Collison, R. C., and Harlan, J. D., fertiliser responses of Baldwin apple trees on an acid soil, B., 245. Winter injury of Baldwin apple trees and its relation to previous tree performance and nutritional treatment, B., 246.

- Colloidal Colours, Ltd., and Durrant, R. G., coating of surfaces of slate, concrete, or brickwork, (P.), B., 456. Colouring materials for coating surfaces, (P.), B., 815.
- Colman, W., hydrogenated naphthalene [for use] against clothes moth, B., 224.
- Colombi, C., and Sacchi, U., action of hypertonic solutions of sodium chloride, A., 530.
- Colonge, J., ethylenic ketones obtained by dehydrating the corresponding ketols, A., 476. Action of mixed organo-magnesium compounds on aliphatic α -ethylenic ketones, A., 847.
- Colonna, M., presence of diacetyl in crude furfuraldehyde, B., 714.
- Colony, M. W. See N. V. Nieuwe Oetroot Maats.
- Colourgravure, Ltd. See Hillman, A. G.
- Colt, E. W. See Woodward, C. B.
- Colthoff, P. J. G. See Waterman, H. I.
- Columbia Appliance Corporation. See Gans, J., and Tolman, C. P.
- Columbia Engineering Corporation. See Lewis, C. H.
- Columbian Carbon Co. See Sweitzer, C. W.
- Combes, R., biochemistry of flowers; mineral nutrition of the corolla, A., 552. Nitrogenous nutrition of the flower, A., 1037.
- Combs, W. B. See Trelogan, H. C.
- Combustion Utilities Corporation. See Brandegee, M. M., Fulton, K. H., Granger, F. S., Loebell, H. O., Luedeke, A. W., and Plummer, W. B.
- Comfort, M. W., and Osterberg, A. E., lipase and esterase in blood-serum; diagnostic value in pancreatic disease, A., 1402.
- Comhaire, S. See Roskam, J.
- Commander-Larabee Corporation. See Dietz, C. F.
- Commercial Filters Corporation. See Goldman, M. A.
- Commercial Solvents Corporation. See Bannister, W. J., Bass, S. L., Bogin, C., Edmonds, W. J., Hancock, C. W., and Swallen, L. C.
- Commons, C. H., jun. See Kinzie, C. J.
- Comolite Corporation. See Gugger, P. H.
- Compagnie Belge des Fertilisants, à Braine l'Alleud, fertilisers [from peat], (P.), B., 517.
- Comp. Française des Conduites d'Eau. See Petot, H.
- Comp. Générale de Construction de Fours, heating of retort furnaces and coke ovens, (P.), B., 134.
- Comp. Gén. de Distillation & Cokéfaction à Basse Temperature & Minière (Intertrust) Soc. Anon., and Internat. Holding de Distillation & Cokéfaction à Basse Temp. et Minière (Holcobami) Soc. Anon., low-temperature carbonisation retort ovens, (P.), B., 8.
- Comp. Gén. d'Électricité, electric batteries, (P.), B., 958.
- Comp. Gén. d'Électrometallurgie, and Lepp, H., purification of metals and alloys, (P.), B., 956.
- Metallgesellschaft Akt.-Ges., and Lepp, H., treatment of light metals, (P.), B., 414.
- Comp. Gén. de Télégraphie sans Fil, apparatus [pump] for maintaining high vacuum, (P.), B., 258.
- Comp. Industrielle Franco-Africaine, apparatus for decantation of liquid and concentration of mud or sludge, (P.), B., 4.
- Comp. Lorraine de Charbons pour l'Électricité. See Brit. Thomson-Houston Co.
- Comp. de Produits Chimiques & Électrometallurgiques Alais, Froges & Camargue, dichloroacetic acid, (P.), B., 396. Preparation of *as*-dichloroethylene, (P.), B., 1129.
- and Basset, J., synthesis of ammonia, (P.), B., 186.
- and Dobry, A., treatment of cellulose and its organic esters, (P.), B., 447.
- Compère, A., modifications of blood composition under the influence of general application of short waves, A., 1517.
- Compere, E. L., McLean, F. C., and Hastings, A. B., state of calcium in blood of rickets, A., 385.
- Compton, A. H., incoherent scattering and the concept of discrete electrons, A., 560. Cosmic rays, A., 803.
- Benade, J. M., and Ledig, P. G., further geographic studies of cosmic rays, A., 1412.
- and Bethe, H. A., composition of cosmic rays, A., 8.
- and Getting, I. A., apparent effect of galactic rotation on the intensity of cosmic rays, A., 911.
- Wollan, E. O., and Bennett, R. D., precision recording cosmic-ray meter, A., 188.
- See also Alvarez, L.
- Compton, C., phosphorus in alternate-bearing sugar prunes, A., 553.
- Compton, J. G. See Levene, P. A.
- Compton, K. G. See Haring, H. E., and Van de Graaff, R. J.
- Comrie, A. A. D., colorimetric determination of preservative value of hops, B., 40. Determination of copper in foods, B., 1021.
- Comstock, D. F., colour photography, (P.), B., 175.
- Comstock, G. F., rôle of titanium in steels and alloys, B., 360.
- and Titanium Alloy Manufg. Co., ferro-titanium alloy, (P.), B., 273. High-strength cast iron, (P.), B., 695.
- Comstock, G. J., and Firth-Sterling Steel Co., ferrous alloy, (P.), B., 273.
- See also Firth-Sterling Steel Co.
- Comstock & Wescott, Inc., and Wescott, E. W., treatment of lateritic [iron] ores [for extraction of nickel], (P.), B., 1147.
- Comte, F., and Monsanto Chem. Co., separation of *m*-cresol from *m*-cresol-*p*-cresol mixtures, (P.), B., 940. Separation of *p*-cresol from a liquid phenolic mixture, (P.), B., 940. Purification by sublimation, (P.), B., 1075.
- See also Monsanto Chem. Co.
- Conant, J. B., Dershe, F., and Mydans, W. E., prosthetic group of *Limulus* haemocyanin, A., 229.
- See also Du Pont de Nemours & Co., E. I.
- Conant, L. C., New Hampshire garnet deposits, A., 1102.
- Conaway, R. F. See Du Pont de Nemours & Co., E. I.
- Concordia Bergbau Akt.-Ges., degasification of solid fuels in intermittently operated chamber ovens, (P.), B., 87.
- Condurp, C. O. See Thermal Industrial & Chem. (T.I.C.) Res. Co., Ltd.
- Cone, C. N., Brown, E. D., and Glidden Co., protein [paper-coating] product, (P.), B., 144.
- Brown, E. D., and Laucks, Inc., I. F., compounded [casein] adhesives [for plywood, etc.], (P.), B., 371.
- Cone, C. N., Galber, H., and Laucks, Inc., I. F., adhesives, (P.), B., 916.
- and Laucks, Inc., I. F., adhesives, (P.), B., 916.
- Cone, F. F., nickel wrought iron, B., 904.
- Cone, F. H., and Houlder, C. B., activated carbon, (P.), B., 583.
- Cone, W. H., Renfrew, M. M., and Edelblute, H. W., anomalous behaviour of nickel sulphide, A., 1208.
- See also Taylor, T. I.
- Congoleum-Nairn, Inc. See Bonney, R. D.
- Coninx, P., colloidal dispersion of coal in a heavy solvent, B., 707.
- Conklin, D. G., conductivity control of vacuum-pan [sugar] boiling, B., 201.
- Conklin, E. B., Lawton, J. J., and Semet-Solvay Co., fractionation of liquids [light oils], (P.), B., 11.
- Conley, J. E., Fraas, F., and Partridge, E. P., countercurrent extraction of potassium and magnesium sulphates from calcined polyhalite, B., 946.
- Conn, H. J., and Darrow, M. A., characteristics of certain bacteria belonging to the autochthonous microflora of soil, B., 740.
- Conn, K. E., and Hartman, R. J., adsorptive capacity of silicas for benzene vapour, B., 342.
- Conn, L. W., Johnson, A. H., Trebler, H. A., and Karpenko, V., micro-determination of copper in milk, A., 512.
- Conn, M. W. See Bost, R. W.
- Connard, M. H. See Zimmermann, P. W.
- Connell, G. A., potassium sulphate, (P.), B., 543.
- Cramer, T. M., Caldwell, H. B., and Pacific Coast Borax Co., evaporation and cooling of liquids, (P.), B., 579.
- Connell, L. C., Hamilton, R. T., and Butler, J. A. V., behaviour of electrolytes in mixed solvents. VI. Electrical conductivities of some salts in water-ethyl alcohol solutions, A., 169.
- Connolly, F. C., band spectrum of arsenic oxide (AsO), A., 9.
- Connolly, J. R., investigating the performance of bearing metals, B., 501.
- Conner, H. A., Riker, A. J., and Peterson, W. H., metabolism of crown gall and hairy-root bacteria and the composition of crown galls, A., 798.
- Conner, S. D., nitrogen, phosphorus, and potassium requirements of Indiana surface soils and subsoils, B., 515.
- Connerade, E., 4,4'-dibenzylidiphenylmethane, A., 1371.
- Connolly, E. E. See Brit. Industrial Solvents.
- Connolly, G. C., Wurzbacher, A. F., and Silica Gel Corp., refining liquid hydrocarbons [from cracking of petroleum], (P.), B., 215.
- See also Miller, E. B.
- Connolly, J. M., and Dyson, G. M., constitution and reactions of thiocarbonyl tetrachloride. II. Reaction with primary arylamines, phenols, and reducing agents, A., 854.
- Connor, J. H., Merritt, M. M., and Tanning Process Co., [degassing] treatment of hides, skins, and leather, (P.), B., 115.
- See also Tanning Process Co.
- Connor, R., and Andrews, D. B., Michael condensation. II. Reactivity of the addendum, A., 215.
- See also Andrews, D. B.
- Connor, S. D., efficiency of phosphate fertilisers as affected by distribution in the soil, B., 866.

- Conquest, V., and Armour & Co., hide preservation, (P.), B., 323.
See also Christensen, Carl W.
- Conrad, C., storage-stability of motor fuels, B., 1031.
- Conrad, F. H., and Beuschlein, W. L., equilibrium relations in system calcium oxide-sulphur dioxide-water (acid region) at pressures below atmospheric, A., 168.
- Conrad, R. M., and Hall, J. L., relation of surface tension to other physical properties of liquid mixtures, A., 817.
- Conrad-Billroth, H., optical absorption of substituted benzenes. VI. Methylbenzenes and xylonitriles, A., 913.
- Conradty, O., body [electrode] for use in electrolysis, (P.), B., 682.
- Conrey, G. W. See Lougary, F. G.
- Conroy, J. T., alkali and associated industries, B., 225.
- Conservenfabrik Lenzburg vorm. Henckell & Roth, and Schlör, J., [mixed] fruit-juice [carbonated water] beverages, (P.), B., 252.
- Consolidated Car Heating Co., Inc. See Tunceda, E. G.
- Consolidated Paper Corporation, Ltd. See Freeman, Horace.
- Consortium für Elektrochemische Industrie Ges.m.b.H., shaped articles from polyvinyl alcohols, (P.), B., 112. Combinations containing polyvinyl compounds, (P.), B., 161. Vinyl formate, (P.), B., 487. Threads, ribbons, tubes, etc., from polyvinyl compounds, (P.), B., 588. Trialkyl esters of phosphoric acid, (P.), B., 938. Threads, ribbons, tubes, etc., [of cellulose or its organic derivatives] capable of being resorbed, (P.), B., 944. Ketten and its derivatives, (P.), B., 1085.
See also Eibner, A., and Herrmann, W. O.
- Constable, F. H., electrical conductivity of copper oxide films showing interference colours, A., 1303.
- Nazif, M., and Eldin, H., variations in interference colours on copper and steel, A., 807.
- Constant, F. W. See Lowance, F. E.
- Constantinescu, G., reactions for identification and differentiation of pseudo-solutions of electragol, collargol, argyrol, and protargol, B., 828.
- Contact Filtration Co. See Moore, M. M.
- Contardi, A., and Ravazzoni, C., enzymic fission of yeast-nucleic acid, A., 1164.
See also Belfanti, S.
- Contiades, X. J. See Ungar, G.
- Continental Can Co., Inc., preparation of spice or other vegetable flavouring products, (P.), B., 653.*
and McKinnis, R. B., cereal beverage products, (P.), B., 827.*
See also McKinnis, R. B.
- Continental Illinois National Bank & Trust Co. of Chicago. See Mason, A. J.
- Continental Oil Co. See Henriksen, A., and Lincoln, B. H.
- Continental Paper & Bag Corporation. See Gustin, A.
- Converse, H. T. See Meigs, E. B.
- Conway, E. J., absorption apparatus for micro-determination of volatile substances. III. Micro-determination of chloride with application to blood, urine, and tissues, A., 1436.
and Kane, F., diffusion equilibria for the isolated frog's kidney. II. Urea, A., 1015.
- Conway, J. W., May, A., and Amer. Lecithin Corp., margarine and composition used therein, (P.), B., 380.
- Conway, M. J., production of wrought iron and articles therefrom, (P.), B., 1147.
- Conway, R. W., double liquid-air trap, A., 1098.
- Cook, A. H. See Barrett, J. W.
- Cook, E. J. R. See Campbell, A. N.
- Cook, E. S., Bambach, K., and Rider, T. H., stability of diethane solutions. II, B., 653.
- Cook, E. W., and France, W. G., electrochemical preparation of tolylhydrazines, A., 77.
and Major, R. T., preparation of 5-ketogluconic acid by bromine oxidation, A., 732.
- Cook, G., and Schepmoes, C., single-bath dyeing of silk with sulphon cyanine black B, B., 800.
- Cook, G. A., and Bates, J. R., photo-oxidation of hydrogen and deuterium iodides, A., 1468.
- Cook, G. C., cinder or dust collector, (P.), B., 210.
- Cook, J. Williamson. See Silsbee, F. B.
- Cook, James Wilfred, is Diels' hydrocarbon $C_{18}H_{18}$ a pure single substance? A., 76. Migration of the quaternary methyl group during dehydrogenation of sterols, etc., A., 487. Carcinogenic hydrocarbons and their relationship to the sterols, A., 1400.
and Dansi, A., synthesis of polyterpenoid compounds. I, A., 756.
- Dansi, A., Hewett, C. L., Iball, J., Mayneord, W. V., and Roe, (Miss) E., polycyclic aromatic hydrocarbons. XIII. Condensed fluorene derivatives, A., 1359.
and Dodds, E. C., chemistry of oestrogenic substances, A., 1033.
and Haslewood, G. A. D., synthetic uses of *as-octahydrophenanthrene*. I, A., 1116. Methylcholanthrene, A., 1117. Convenient synthesis of cholanthrene, A., 1117.
- Haslewood, G. A. D., and Robinson, (Mrs.) A. M., synthesis of cholanthrene, A., 968.
- Hewett, C. L., Mayneord, W. V., and Roe, (Miss) E., synthesis of compounds related to the sterols, bile acids, and oestrus-producing hormones. IV. Constitution of Diels' hydrocarbon, " $C_{26}H_{24}$," from cholesterol, A., 74.
and Roe, (Miss) E., constitution of equilin, A., 862.
See also Barry, G., and Cohen, A.
- Cook, L. W. See Texas Co.
- Cook, M., metal losses in melting brass and other copper alloys, B., 952.
- Cook, M. T., and Otero, P. B., gum-producing organisms in sugar cane, B., 249.
- Cook, N. G. See Gibbons Bros., Ltd.
- Cook, R. C. See Universal Oil Products Co.
- Cook, R. L., divergent influence of degree of base saturation of soils on availability of native, soluble, and rock phosphates, B., 688.
- Cook, R. P., and Robinson, P. L., certain physical properties of cyanogen and its halides, A., 1064.
- Cook, S. F., respiratory gas exchange in *Termopsis nevadensis*, A., 371.
- Cook, S. G., determination of diphenylamine in smokeless powders, B., 879.
- Cook, W. A., and Ficklen, J. B., determination of benzene in air, B., 576.
- Cook, W. H., Hopkins, J. W., and Geddes, W. F., rapid determination of moisture in grain. II. Calibration and comparison of electrical moisture meters with vacuum oven for hard red spring wheat. III. Calibration and comparison of electrical moisture meters with vacuum oven for amber durum wheat, barley, and oats, B., 121, 249. Rapid determination of moisture in grain, B., 697.
and Rose, R. C., effect of heat treatment on viscosity of gluten dispersed in alkali, acid, and neutral solvents, A., 701. Hydrolysis of gluten induced by solvent, A., 701.
See also Rose, R. C.
- Cook, W. O., Miller, O. O., Whetzel, J. C., and Amer. Sheet & Tin Plate Co., metal-coated sheets [tinplate], (P.), B., 274.
- Cooke, A. H. See Simon, F.
- Cooke, M. B., Schutt, H. C., and Alco Products, Inc., vapour-phase cracking [of hydrocarbon oils], (P.), B., 892.
- Cooke, S. R. B., amenability of various iron ores to rigorous concentration, B., 103.
and Doan, D. J., mineragraphy and X-ray analysis of stanniferite from the Swansea mine, Goodsprings, Nevada, A., 842.
See also Coghill, W. H., and Diener, F. P.
- Cooke, T. G. See Phipps, T. E.
- Cooke, W. R. See Sherratt, W.
- Cookson, J. W. See Osterberg, H.
- Cool, R. D., and Graham, J. D., sintered pyrex glass aeration tubes, A., 58.
- Coolhaas, C., combustibility of tobacco, B., 429. Slow-burning properties of tobacco, B., 782. Smouldering period of tobacco leaf, B., 969.
- Coolidge, A. S., and James, H. M., approximations in calculations of atomic interaction and activation energies, A., 15.
See also James, H. M.
- Coombs, G. E., uses of rubber, B., 468.
- Coons, C. N. [with Schiefelbusch, A. T., Marshall, G. B., and Coons, R. R.], metabolism during pregnancy, A., 1528.
- Coons, R. R. See Coons, C. N.
- Cooper, A. T. See Bramley, A.
- Cooper, C. See Holmes & Co., Ltd., W. C.
- Cooper, E. A., and Preston, J. F., enzyme formation and polysaccharide synthesis by bacteria, A., 1419.
- Cooper, E. R. See Darbyshire, J. A.
- Cooper, F. S., and Kruger, P. G., standard wave-lengths in the copper spectrum in the region 80-650 Å., A., 136.
See also Kruger, P. G.
- Cooper, H. P., and Wallace, R. W., effects of dolomitic limestone on yields and calcium- and magnesium-deficiency symptoms in crops, B., 422.
- Cooper, H. S., and Kemet Labs. Co., Inc., high vacua, (P.), B., 388.
- Cooper, J. F. See Swingle, M. C.
- Cooper, K. F., and Amer. Cyanamid. Co., fumigating compound and method of fumigating, (P.), B., 576.
- Cooper, L. H. N., manganese in marine plankton, A., 1281. Rate of liberation of phosphate in sea-water by the breakdown of plankton organisms, A., 1281. Iron in the sea and in marine plankton, A., 1343.
See also Harvey, H. W.

- Cooper, R. C., alleged isolation of *o*-3-xylydino from commercial xylydino, B., 539.
See also Campbell, N.
- Cooper, S. R. See Nichols, M. L.
- Cooper, T. S., British colours and pigments, B., 913.
- Coover, W. F. See Nelson, P. M.
- Cope, A. C., structure of keten diphenyl acetal, A., 614.
- Cope, C. L., and Goadby, H. K., idiopathic hyperproteinemia, A., 887.
- Cope, F. See Barnes, D. J.
- Cope, F. T., and Electric Furnace Co., heat treatment [of refrigerator evaporators], (P.), B., 882.
- Cope, O., and Corkill, A. B., action of insulin and adrenaline in young adrenalectomised rabbits, A., 538.
- Corkill, A. B., Marks, H. P., and Ochoa, S., chemical changes associated with muscular contraction in normal and adrenalectomised animals, A., 109.
and Marks, H. P., relation of the pituitary gland to the action of insulin and adrenaline, A., 901.
- Copel, P., precision photometry, A., 188.
- Copeland, L., milk and butter-fat yields of Jersey cows as affected by frequency of milking, A., 647.
- Copeland, P. L., secondary omission of electrons from complex targets, A., 1047.
- Copeman, L. G., and Copeman Labs. Co., treatment of fruit or other growing vegetable matter, (P.), B., 39.
See also Copeman Labs. Co.
- Copeman Laboratories Co., and Copeman, L. G., temporary protective coatings for articles and application and removal thereof, (P.), B., 110.
See also Copeman, L. G.
- Copenhauer, J. W., Roy, M. F., and Marvel, C. S., hexa-*p*-alkylphenylethanes; effect of *p*-alkyl group on dissociation of the ethane, A., 1115.
- Copisarow, M., biochemical control of cancer, A., 107. Malignant growth in relation to enzyme activity, A., 381.
- Coplan, H. M., and Sampson, M. M., effects of a deficiency of iodine and vitamin-A on the thyroid gland of the albino rat, A., 1285.
- Coplands, M., and Green, A. G., chemistry and pharmacology of acetylsalicylic acid and its salts, B., 1022.
- Copley, P. J., mercerisation of [single] cotton threads or fibres, (P.), B., 19.
- Copley, M. J., and Phipps, T. E., surface ionisation of potassium iodide on tungsten, A., 1303.
- Simpson, O. C., Tenney, H. M., and Phipps, T. E., speed of divergent-nozzle pumps, A., 1342.
- Coppée & Co., E., rotary [pneumatic] apparatus for separation of powdered or granular material, (P.), B., 658.
- Coppens, L., bedding of firedamp; relative adsorbing power of various coals, B., 706.
- Copper & Brass Research Association. See Freeman, J. R., jun.
- Copping, A. M. See Chick, H.
- Coppo, M., precipitin reactions and viscosity, A., 771. Viscosity and precipitation [in immune sera], A., 881.
See also Messini, M.
- Coppock, J. B. M., compressibilities and expansion coefficients of gases at low pressures, A., 438. Volume coefficient of expansion of deuterium, A., 1064.
- Coppola, M., blood-cholesterol and fat and lipin contents of the adrenal cortex during pregnancy and after parturition, A., 645.
- Copuzeanu. See Maxim, N.
- Corbellini, A., and Viganò, C., stereo-isomerism of 2,2'-disubstituted derivatives of diphenyl. III., A., 1496.
See also Rondoni, P.
- Corbet, A. S., tropical soil microbiology. II. Bacterial numbers in the soil of the Malay peninsula, A., 257. Formation of hyponitrous acid as an intermediate compound in the biological or photochemical oxidation of ammonia to nitrous acid. II. Microbiological oxidation, A., 787.
- Corbett, G., report on tobacco, B., 245.
- Corbett, G. H., Yusope, M., and Hassan, A., attraction of *Necrobium rufipes*, de Geer. (copra beetle), to fatty acids of coconut oil and to types of copra, B., 691.
- Corbin, M. H., and Ault & Wiborg Corp., securing durable adhesions of liquid coatings to zinc surfaces, (P.), B., 735.
- Corcoran, A. C. See Rabinovitch, I. M.
- Corcoran, J. C., and Superior Tool & Manufg. Co., Inc., paper, (P.), B., 721.
- Cord, M., determination of water in light petroleum, B., 536.
- Cordes, J. H., gas-generating apparatus, (P.), B., 485.
- Cordier, D., effect of carbon dioxide on blood-sugar; effect of change in acid-base equilibrium; influence of the nervous system, A., 1273.
- Cordier, P., phenylpyruvic acid; product of its condensation with phenylacetone, A., 975.
- Coredo, A. P. A. C. zu, fuels, (P.), B., 538.
- Corey, C. H. See Sikes, A. W.
- Corey, R. B., crystal structure of tetramethylammonium silicofluoride, A., 17.
and Pestrecov, K., space-group of silver nitrate diammoniate, AgNO₃·2NH₃, A., 285.
and Wyckoff, R. W. G., crystal structure of dimethylammonium stannichloride, A., 286.
See also Wyckoff, R. W. G.
- Corey, R. C. See Finnegan, T. J.
- Cori, C. F., and Shine, W. M., formation of carbohydrate from glycerophosphate in the liver of the rat, A., 1273.
- Corin, C., atomic vibrations of Y molecules. I. Infra-red spectrum of acetone, A., 806.
- Corkery, F. W., availability, pure chemistry, refining, and uses of coal-tar products, B., 6.
- Corkill, A. B., Marks, H. P., and Soskin, S., effects of sympathetic stimulation and of adrenaline on muscle-glycogen, A., 780.
and Ochoa, S., toxæmia and carbohydrate metabolism, A., 536.
See also Cope, O.
- Corl, C. S. See Gnadinger, C. B.
- Corman, H. E., properties of oils and fats in relation to uses, B., 275.
- Cormier, M., hydrocyanic acid in *Pyrocyclonia winkleri*, L.D., A., 1181.
See also Chevrel-Bodin, M. L.
- Corminbœuf, F., cheeses incorporating *Penicillium glaucum*, B., 331.
- Cornelius, H., Al transformation range in abnormal steels, B., 676.
See also Eilender, W.
- Cornell University. See Sharp, P. F.
- Corner, G. W. See Allen, W. M.
- Cornil, L., and Paillas, J. E., hypoglycæmic action of testicular extract in sugar diabetes, A., 641.
- Corning Glass Works, transparent heat-resisting borosilicate glass, (P.), B., 101.
and Fleming, W. O., lehrs, (P.), B., 454.
and Kates, W. A., attachment of metal parts to electric insulators, (P.), B., 30.
and Taylor, W. C., glasses for stems and flares of electric lamps, (P.), B., 546.
See also Hood, H. P., Hyde, J. F., and Nordberg, M. E.
- Cornish, R. E. See Evans, H. M.
- Cornog, J., Karges, R. A., and Horrabin, H. W., iodine monochloride, A., 51.
and Lamb, P. A., reactions in liquid sulphur dioxide, A., 1334.
- Cornthwaite, W. R., and Jordan, E., creatinine derivatives. I., A., 352.
- Cornubert, R., Borrel, C., De Demo, Garnier, J., Humeau, R., Le Bihan, H., and Sarkis, G., extinction of ketone reactivity, A., 621.
- Cornut, P. See Hermann, H.
- Corran, R. P. See Rymill, F. E.
- Corson, B. B. See Ipatiev, V. N.
- Corson, H. P. See Grasselli Chem. Co.
- Corson, M. G., and Metal & Thermit Corp., corrosion-resistant [nickel] alloy, (P.), B., 273.
- Corte, H. See Bergmann, E.
- Cortegiani, E. See Halpern, N.
- Cortese, F., and Bauman, L., synthesis of conjugated bile acids. I. Glycocholic acid, A., 1237.
- Corver, J. T. See Honig, P.
- Cory, E. N., insect control in 1932, B., 118.
and Langford, G. S., sulphated alcohols in insecticides, B., 968.
- Coryllos, P. N., physics applied to tuberculosis, A., 1403.
- Cosciug, T., naphthalene and β -(2-methyl-naphthalene from Rumanian crude oil, B., 1081.
- Coscolluela, J. A., bacteriological purification of distillery slops, B., 696.
- Cosentino, F. N., lesions produced by adhesive plaster; methods for determining quality, B., 1163.
- Cosmann, O., measurement of thermal expansion of solid bodies, B., 177.
- Cosme, L. See Maraño, J.
- Cosmovici, N. L., and Jitariu, P., comparison of surface tension of lymph and blood of the dog, A., 103.
- Cosmulesco, I. See Rathery, F.
- Cossor, Ltd., A. C., and Ardenne, M. von, fluorescent screens for cathode-ray tubes, (P.), B., 194.
- Costa, D., detection of vegetable lecithins as substitutes for egg in food pastes, B., 1116.
- Costantini, A., behaviour of digestive enzymes in experimental intoxication by sodium fluoride, A., 531.
and Ballarin, G., action of different salts introduced intravenously on intestinal peristalsis, A., 530.
- Coste, theory of gasification, B., 708.
- Coste, J. H., and Garratt, D. C., specification for enamelled hollow-ware, B., 545.
and Shelbourn, E. T., chemical and biological considerations affecting control of swimming baths, B., 432.
and Wright, H. L., nature of the nucleus in hygroscopic droplets, A., 1073.

- Costeanu, G., Freymann, R., and Naherniac, A., near infra-red absorption spectra of liquefied, gaseous, or dissolved ammonia, A., 563.
- Costeanu, N. D., detection and determination of gold in solutions, B., 729.
- Costeanu, R. N., detection and determination of gold by means of carbon monoxide, A., 1339.
- Coster, D., fine structure of X-ray absorption edges in close-packed cubic and close-packed hexagonal crystal lattices, A., 1059.
- Dijk, E. W. van, and Lameris, A. J., pre-dissociation in the upper level of the second positive group of nitrogen (C^2II), A., 555.
- and Kronig, R. de L., new type of Auger effect and its influence on the X-ray spectrum, A., 273.
- Kuipers, H. H., and Huizinga, W. J., excitation potential of the X-ray satellites in the L series, A., 1184.
- and Smoluchowski, R., fine structure of X-ray absorption edges of copper and zinc in copper-zinc alloys, A., 291.
- Costil, L. See Saenz, A.
- Costing, H. J., physico-chemical variables in a Minnesota lake, A., 841.
- Cotel, E., wear of steel rails, B., 593.
- Cotner, F. B. See Martin, S.
- Cotterill, W., malleable iron, (P.), B., 29*.
- Cottet, J. See Chabrol, E.
- Cottier, W., control of the grass grub (*Odontria zealandica*) in small areas, B., 374. Red-mite control by oil sprays, B., 691.
- Cotton, A., unipolar interior conductivity of certain crystals, A., 817.
- Cotton, F. H., determination of the colour of [rubber] latex, B., 961. Special properties of [rubber] latex, (P.), B., 240.
- Cotton, W. J. See Nat. Aniline & Chem. Co.
- Cottrall, L. G., hydration of cellulose in beating, B., 399.
- and Garthshore, J. L., laboratory beater for beating investigations [of wood pulp], B., 16.
- Coubrough, G. B., and Lummus Co., distillation of heavy petroleum oils, (P.), B., 217. Condensation of [corrosive] vapours, (P.), B., 579. Apparatus for [continuous] distillation [of petroleum oils], (P.), B., 663. Separation of heavy petroleum mixtures, (P.), B., 1034. Column, (P.), B., 1076.
- Couch, J. F., lupin studies. VIII. Alkaloids of *Lupinus palmeri*, S. Wats, A., 97.
- Clawson, A. B., and Bunyea, H., toxicity for sheep of aqueous solutions of hydrocyanic acid and the effectiveness of the nitrite-thiosulphate combination as a remedy, A., 1022.
- See also Bunyea, H., and Clawson, A. B.
- Coufalik, F. See Šimek, B. G.
- Coughtrey, W. C. J. See Taylor, T. W. J.
- Coull, J., and Hope, H. B., ternary system *isoamyl alcohol*-propyl alcohol-water, A., 1457.
- Hope, H. B., and Gouguell, B., kinetics of reaction between hydrogen peroxide and sodium salt of *p*-toluenesulphon-chloroamide (chloramine-T), A., 1207.
- Coulon, P. See Boutaric, A.
- Coulouma, J., musts of the dry warm 1934 season in the Biterrois and Saint-Pons regions, B., 695.
- Coulson, C. A., electronic structure of H_3^+ , A., 810.
- Coulson, E. A., homologues of naphthacene. II. 2-Methyl- and 2:7-dimethyl-naphthacene: synthetic applications of 2:6- and 2:7-dimethyl-1:2:3:4-tetrahydronaphthalene, A., 334.
- Coulson, E. J., iodine content of oysters, A., 377.
- Remington, R. E., and Lynch, K. M., metabolism of copper, A., 1017.
- Coulter, M. D. See Munroe, T. B.
- Coulter, S. T., and Hill, O. J., relation between hardness of butter and butter fat and iodine value of the butter fat, B., 122.
- Coulthard, C. E., sterilisation by dry heat at 150°, with special reference to oils, B., 605. Sterilisation of injection of bismuth, B.P., B., 605.
- and Hall, G. F., effect of sterilisation on solutions of [B.P.] calcium chloride, B., 605.
- Coumou, D. J. See Stahel, E.
- Coumou, J., structure viscosity of solutions of highly polymerised substances, A., 1074.
- See also Iterson, G. van, jun.
- Couraud, J., distribution of organic acids in human sweat, A., 649.
- Cournand, A. See Richards, D. W., jun.
- Cournot, J., and Chausain, M., appreciation and measurement of corrosion [of metals], B., 231. Influence of method of immersion of samples in corrosion tests, B., 311.
- and Meker, G., cementation of copper by aluminium, B., 361.
- Courrier, R., folliculin content of normal and ectopic testicles, A., 259.
- Courtauld, S. See Courtaulds, Ltd.
- Courtaulds, Ltd., and Courtauld, S., artificial threads, filaments, etc., (P.), B., 300.
- and Hazeley, E., [decorative] sheets of regenerated cellulose, (P.), B., 1138.
- and Robertson, S., coloured artificial filaments, threads, bands, etc., (P.), B., 626.
- Courtney, D. S., commercial soft-curd milk, B., 1066.
- Courtney, E. See Hileman, J. L.
- Courtney, R. P., and Bakelite Corp., coating of porous material, (P.), B., 1153.
- and Wakefield, H. F., apparatus for measuring adhesion of dried films, B., 69.
- Courtois, J., influence of the p_H of medium on hydrolysis of α - and β -glycerophosphoric acids by grain phosphatases, A., 122.
- Courtot, C., and Baron, A., halogenation of wool, B., 488.
- and Tung, T. Y., interaction of thionyl chloride with phenol, A., 855.
- Courty, C., magnetic micro-determination of iron in blood, A., 1262.
- Cousins, W. R. See Clark, L. M.
- Coutts, J., seasonal variation of santolin in Scottish *Artemisia*, B., 253.
- Coutts, J. R. H., mechanical analyses of Natal soils, B., 243. "Single-value" soil properties: significance of soil constants. VIII. Relationships between sticky point and nature of exchangeable ions in soil, B., 1156.
- Coventry, F. L., Shelford, V. E., and Miller, L. F., conditioning a chloroamine-treated water supply for biological purposes, B., 528.
- Cowan, D. W., creatine content of the myocardium of normal and abnormal human hearts, A., 516.
- Cowan, J. G. See Universal Grinding Wheel Co.
- Cowan, S. L., and Ing, H. R., curariform activities of strychnine metho-salts and curarine chloride, A., 528. Quaternary ammonium salts and the action currents in nerve, A., 1412.
- Coward, H. F., and Hersey, M. D., accuracy of manometry of explosions; general survey and comparison of piston- with diaphragm-type manometers, B., 751.
- Cowell, S. J., diet and disease, A., 774.
- Cowgill, G. R. See Dann, M. Melnick, D., and Roe, J. H.
- Cowgill, W. W., and Sardik, Inc., [dried, water-dispersible] pectin, (P.), B., 782.
- See also Sardik, Inc.
- Cowie, D. B. See Swann, W. F. G.
- Cowland, A. N. See Woodard, W. A.
- Cowland, J. W., effect of resin spray on control of white fly; [report of entomological section, 1932-1933], B., 517.
- Cowles, E., and Electric Smelting & Aluminium Co., conditioning of hydrated alkali silicates, (P.), B., 1092.
- Cowles, M. W., tastes and odours in water supply caused by electric currents, B., 383.
- Cowles, R. P., and Brambel, C., gear pump and hose as a collector of water samples for gas analysis, A., 467.
- Cowley, E. G., and Partington, J. R., dielectric polarisation. XIII. Dipole moments of simple aliphatic nitriles, A., 809.
- See also Partington, J. R.
- Cowman, D. H. B., compositions for use as putty, (P.), B., 1045.
- Cowperthwaite, I. A., and Shrawder, J., jun., partial molal heat of dilution of sulphuric acid from c.m.f. measurements, A., 36.
- See also Shrawder, J., jun.
- Cox, A. B. See Wark, I. W.
- Cox, C. I., analysis of process solvents in leathercloth manufacture, B., 586.
- Cox, C. R., equipment for chlorination of small water-supplies, B., 128.
- Cox, E. G., Goodwin, T. H., and Wagstaff, (Miss) A. I., crystalline structure of the sugars. I. Simple sugars and glycosides. II. Methylated sugars and the conformation of the pyranose ring, A., 1195, 1484.
- Pinkard, F. W., Wardlaw, W., and Webster, K. C., planar configuration for quadricovalent nickel, palladium, and platinum, A., 684.
- and Webster, K. C., planar structure of quadricovalent cupric compounds, A., 920.
- Cox, E. R., physical constants of propane, A., 815.
- See also Cole, H. S., jun., and Texas Co.
- Cox, G. A., detecting "non-acid" milk, B., 250.
- Cox, G. C., and McIntyre, H. K., [electrolytic] purification process [for salts], (P.), B., 1002.
- Cox, G. E., and Amer. Cyanamid Co., granulation of cyanamide, (P.), B., 270.
- Cox, G. J., and Berg, C. P., comparative availability of *d*- and *l*-histidine for growth, A., 113.
- Cox, H. E., composition of fish pastes, B., 378.
- and Lewin, J. U., chemical examination of furs in relation to dermatitis. V. Action of acid on Bandrowski's base, B., 722.

- Cox, H. L. See Carbide & Carbon Chemicals Corp.
- Cox, H. R. See Bauer, J. H.
- Cox, J. A., and Daniel, D. M., *Ascogaster carpocapsæ*, Viereck, in relation to arsenical sprays, B., 742.
- Cox, J. B., ovens for baking, roasting, and drying purposes, (P.), B., 434, 578.
- Cox, N. L., Kraus, C. A., and Fuoss, R. M., properties of electrolytic solutions. XVI. Conductance of electrolytes in anisole ethylene bromide, and ethylene chloride at 25°, A., 705.
- Cox, R. E. See Gen. Electric Co.
- Cox, R. F. B., and McElvain, S. M., acetoacetic ester condensation. IX. Condensation of ethyl *p*-isobutyryl- β -phenylpropane-*aa*-dicarboxylate, A., 83.
- See also Meincke, E. R.
- Cox, R. S. See Hallam, C. D.
- Cox, R. T. See Myers, F. E.
- Cox, W. M., jun., and Reid, E. E., isomeric branched hexadecanols, A., 1481.
- Coyne, A. See Necheles, H.
- Cozic, M., *B. xylinum* cultures in lactic acid, A., 255.
- Crabtree, H. G., differential effect of radium radiation on carbohydrate metabolism of normal and tumour tissues irradiated at low temperature, A., 1414.
- Crabtree, I. J. See Eastman Kodak Co.
- Crabtree, R. W. See Christiansen, W. N.
- Craddock, Q. L. See Watson, W.
- Craddock, R. H. See Smith, H. Grayson.
- Craft, H. A. See Du Vigneaud, V.
- Crago, A., Martin, H. S., and Phosphate Recovery Corp., composition suitable for use in flotation [of phosphate ores], (P.), B., 629.
- Cragwall, G. D. See Pasternack, R.
- Crahan, P. F., Moulton, S. A., and Seavoy, G. E., extraction of [alkali] metals from amalgams, (P.), B., 909.
- See also Moulton, S. A.
- Craig, C. F., and Scott, L. C., antigens for complement fixation in amoebiasis, A., 1395.
- Craig, D., nitro- and amino-derivatives of *tert*-butylbenzene, A., 482.
- Craig, D. N. See Vinal, G. W.
- Craig, G. L., and Irion, C. E., rapid electrolytic patina on copper, B., 411.
- Craig, L. C. See Jacobs, W. A.
- Craig, N., biochemistry [of soils and sugar cane], B., 865. Properties of sugarcane soils of Mauritius, B., 1156.
- and Halais, P., influence of maturity and rainfall on properties of lateritic soils in Mauritius, B., 242.
- Craig, P. H., and Inver Corp., preservation of fruits, vegetables, etc., (P.), B., 1022.
- Craig, R. See Standard Oil Co. of California.
- Craig, W. B., and Packard Motor Car Co., drawing compound [for deep-drawing metal sheets], (P.), B., 506.
- Craig, W. E., manufacture of a quinine mercuric compound; [antisypilitic], (P.), B., 1165.
- and Hamilton, C. S., reactivity of nuclear chlorine in 5-substituted derivatives of 2-chlorophenylarsinic acid, A., 637.
- Craighead, C. M. See Aluminium, Ltd.
- Craigie, J., and Wishart, F. O., complement fixation reaction with elementary bodies of vaccinia and specific precipitable substance of vaccinia, A., 644.
- Craik, J., Berger, K. H., and Browne, A. W., azido-dithiocarbonic acid. VIII. Guanidine trinitride and azido-dithiocarbonate, A., 72.
- Cram, H. G., effect of dryer drainage on drying of paper and its control, B., 1136.
- Cram, S. W. See Winans, J. G.
- Cramer, F. B. See Pacsu, E.
- Cramer, T. M. See Conell, G. A.
- Cramer, W. B. See Wells, S. D.
- Crampton, D. K., Burghoff, H. L., and Chase Cos., Inc., copper-base alloy, (P.), B., 908.
- and Croft, H. P., wrought copper-nickel-aluminium alloys, B., 594.
- Crampton, E. W., pasture studies. IV. Nutrient value of pasture herbage: quality of protein, B., 245. Effect of full *versus* limited feeding on protein level required in the hog ration, B., 653.
- and Hopkins, J. W., method of partial regression in analysis of comparative feeding trial data. II., A., 242.
- and Raymond, L. C., pastures. III. Fertilisation of permanent pastures for steer grazing, B., 73.
- Crandall, B. S. See Lambert, E. B.
- Crandall, L. A., jun., chondroitin compounds, (P.), B., 124.
- and Anderson, M. X., determination of the state of hydration of the body by the amount of water available for solution of sodium thiocyanate, A., 892.
- Crandell, D. de F., and Nat. Gypsum Co., plastic [water]-paint, (P.), B., 1152.
- Neher, R., and Nat. Gypsum Co., mixing machine, (P.), B., 532.
- Crane, H. L., and Hardy, M. B., interrelation between cultural treatment of pecan trees, size and degree of filling of the nuts, and composition of kernels, B., 166.
- See also Demaree, J. B.
- Crane, H. R., Delsasso, L. A., Fowler, W. A., and Lauritsen, C. C., cloud-chamber studies of the γ -radiation from lithium bombarded with protons, A., 1186.
- and Lauritsen, C. C., disintegration of beryllium by deuterons, A., 1297. Experiments with artificially-produced radioactive substances, A., 1441. Radioactivity from carbon and boron oxide bombarded with deuterons and the conversion of positrons into radiation, A., 1442.
- See also Lauritsen, C. C.
- Crane, R., and Lauritsen, C. C., high-potential porcelain X-ray tube, A., 57.
- Cranfield, H. T., and Mackintosh, J., taint in milk during feeding of molassed beet pulp, B., 1019.
- Crapo, F. M., and Indiana Steel & Wire Co., [overhead] telephone transmission line, (P.), B., 108.
- Crasemann, E., influence of loft- and frame-drying on mineral content of dried fodder, B., 605.
- Crasnar, L., and Gavrilescu, N., respiration of the brain, A., 1529.
- Crasu, V. See Ostrogovich, A.
- Crater, W. de C. See Hercules Powder Co.
- Craven, E. C. See Pemberton, E. S.
- Crawford, C. A., Geiger, G. F., and Mudge, W. A., engineering properties of "K-monel" metal, B., 594.
- Crawford, C. R., refining of paper stock, B., 58.
- Crawford, F. A. F. See Imperial Chem. Industries.
- Crawford, F. H., and Ffolliott, C. F., band spectra of the halides of aluminium, A., 144.
- and Jorgensen, T., jun., band spectra of the hydrides of lithium. I. and II., Li⁷H², A., 561, 1051.
- See also Applebey, M. P.
- Crawford, (Miss) H. M., reaction between 2:3-dimethyl-1:4-naphthaquinone and magnesium phenyl bromide. I., A., 1501.
- Crawford, J. W. C. See Imperial Chem. Industries.
- Crawford, M. F., and Grace, N. S., hyperfine structures in La III; nuclear magnetic moment of lanthanum, A., 676.
- and Wills, L. A., hyperfine structure formula for the configuration p^3s , A., 1046.
- Crawford, M. O., [pack] filter, (P.), B., 787.
- Craford, S. R., Gatty, O., and Philpot, J. St. L., theory of electrocapillarity. III., A., 698.
- and McKay, H. A. C., drop-weight method for determination of electrocapillary curves, A., 820.
- Creac'h, P., action of hyperthermic agents on respiration of cells of starfish tissues, A., 245.
- See also Genevois, L.
- Creamer, A. S. See Geller, R. F.
- Creamery Package Manufacturing Co., Ltd., and Yates, H., filter, (P.), B., 787.
- Apparatus for pasteurising liquids, (P.), B., 787.
- Credner, W. See Blanck, E.
- Creedy, F. See Easton, E. C.
- Cremer, E., ortho-para transformation in solid hydrogen, A., 586. Kinetics of heterogeneous ortho-para-hydrogen transformation on solid oxygen, A., 708.
- Cremer, H., biological experiments with esters of *p*-hydroxybenzoic acid, A., 1412.
- Crenshaw, J. L. See Armbruster, M. H.
- Crepaz, E., and Lops, S., possibility of altering composition of the filler metal by means of coatings in oxy-acetylene welding, B., 594.
- and Salmoni, R., glycerol-lithargo cements. I. Setting and hardening. II. Stability of volume, B., 228.
- Crépin, A. See Molliard, M.
- Crescitelli, F., respiratory metabolism of *Galleria mellonella* (bee moth) during metamorphosis at different constant temperatures, A., 889.
- and Taylor, I. R., changes in concentration of reducing substances during metamorphosis of *Galleria mellonella* (bee-moth), A., 519.
- Crespi, M., adsorption of gases by glass walls. XI. Nitric oxide, A., 441. Kinetics of adsorption. I. Velocity of adsorption of nitrous and nitric oxides by glass, A., 587.
- Crespi Gherzi, R. A. See Sagastume, C. A.
- Cressall, A. E., treatment of cereal germ, (P.), B., 700.
- Cretcher, L. H. See Butler, C. L., and Renfrew, (Miss) A. G.
- Creuss-Callaghan, G., micro-determination of magnesium, A., 837.
- Crew, J. A., treatment of [silica] sand, (P.), B., 101.
- Crews, S. K. See Allport, N. L., and Cocking, T. T.

- Creydt, R. See Haring, H. W.
- Crickmay, G. W., origin of barite in the Appalachian Valley, A., 1345.
- Criegee, R., specificity of oxidising agents: comparison of oxidising action of lead tetra-acetate and periodic acid on polyhydroxy-compounds, A., 454. General mechanism of fission of carbon chains, A., 727.
- Crimm, P. D., and Short, D. M., qualitative blood-cell changes in the rat due to vitamin-A, A., 1428.
- Crippa, G. B., and Perroncito, G., 2-amino-benzimidazole, A., 631. Chemistry of 2-arylozo- α -naphthylamine compounds compared with their 1-arylozo- β -naphthylamine isomorphs, A., 1489.
- Criscuolo-Cantarella, I., tanning with complex aluminium salts, B., 469. See Casaburi, V.
- Crisler, G., methylene-blue and anoxæmia, A., 878.
- Crist, R. H., and Dalin, G. A., "isotopic equilibria" in the hydrogen-hydrogen oxide system, A., 33.
- Cristesco, J., obtaining synthetic alcohols from mixtures of gases, B., 258. Alcohols, (P.), B., 618.
- Cristol, P., Fourcade, J., and Seigneurin, R., dissociation of carbamide in dilute solution, A., 702. Absence of dissociation of thiocarbamide and substituted thiocarbamides in dilute aqueous solution, A., 1111.
- Critchfield, C. L. See Wallace, E. L.
- Critchley, G. N., refining, testing, and utilisation of petroleum oils. VII. Lubricating oil treating, B., 535.
- Crites, R. A. See Betterton, J. O.
- Croakman, E. G. See Nat. Aniline & Chem. Co.
- Crocetta, A., adrenaline and vagal tonus. II., A., 900. See also Viale, G.
- Crocker, E. C., seeking a working language for odours and flavours, B., 1165.
- Crocker, P. B., and Sentry Co., [combustion assay] furnace, (P.), B., 393.
- Crocker, W., Hitchcock, A. B., and Zimmermann, P. W., similarities in effects of ethylene and plant auxins, A., 1548. See also Zimmermann, P. W.
- Crockford, H. D., and Brawley, D. J., solubility of lead sulphate in water and aqueous solutions of sulphuric acid, A., 159. See also Douglas, T. B.
- Croft, H. P. See Crampton, D. K.
- Cromwell, H. W. See Unger, L.
- Cromwell, R. H., [production of alloys in a] cupola, (P.), B., 772.
- Crooke, A., phosphates and fermentation, B., 474.
- Croope, D. H. See Dow Chem. Co.
- Crosbie, H. H., testing of ergot, B., 174.
- Crosby, B. L., and Kirk, P. L., microscopy of the amino-acids and their compounds. II. Pierates and flavianates, A., 1516.
- Crosby, B. O. See Best, R. W.
- Crosby, W. E. See Seligman, R.
- Crosnier, R. See Jame, L.
- Cross, A. H. B., and Rees, W. J., basic refractories for steel-melting furnaces. I. Extended tests on mixtures of Grecian magnesite and kaolin; microscopical investigation of magnesite-kaolin mixtures. II. Dolomite-kaolin mixtures, B., 22.
- Cross, H. C., high-temperature tensile, creep, and fatigue of cast and wrought high- and low-carbon 18 chromium-8 nickel steel; progress Report of the A.S.M.E.-A.S.T.M. Research Committee on effect of temperature on properties of metals, B., 190.
- Cross, P. C., hydrogen sulphide band at 10,100 Å., A., 280. Thermodynamic properties of sulphur compounds. I. Hydrogen sulphide, diatomic sulphur, and the dissociation of hydrogen sulphide, A., 569.
- Cross, R., anti-knock compounds for internal-combustion engines, (P.), B., 261. and Silica Products Co., inorganic gel composition [for paints and for waterproofing cement], (P.), B., 189.
- Cross, R. J., and S. M. A. Corp., electro-osmotic process and apparatus, (P.), B., 1100.
- Cross, W. M., and Gasoline Products Co., Inc., treatment of hydrocarbons, (P.), B., 486. Treatment of hydrocarbon oils, (P.), B., 486.
- Crosse & Blackwell, Ltd., Clayton, W., and Johnson, R. I., sealing compositions for cans, jars, and other containers, (P.), B., 961. Sealing composition for containers, such as metal cans, (P.), B., 1026.
- Crossfield, A. S. See Rebber, L. L.
- Crossley, F. S. See Hartung, W. H., and Miller, E.
- Crossley, H. See Strafford, N.
- Croucher, H. H., estimation of maturity of a field of [sugar] cane, using the hand refractometer, B., 690. and Martinez, R. S., coconut husk ash as fertiliser, B., 471.
- Crowell, C. D., jun., Hodge, H. C., and Line, W. R., analysis of tooth samples composed of enamel, dentine, and cementum, A., 511.
- Crowfoot, (Miss) D., X-ray single-crystal photographs of insulin, A., 687. Interpretation of Weissenberg photographs in relation to crystal symmetry, A., 918. X-Ray crystallography of the toad poisons, bufagin and cinobufagin, and of strophanthidin, A., 921. See also Bernal, J. D.
- Crown Central Petroleum Corporation. See Keeling, W. O., and Lang, F. R.
- Crowther, B. M. See Oliphant, M. L. E.
- Crowther, E. M., comparative trials of calcium cyanamide and other nitrogenous fertilisers on arable crops, B., 777. Soil organic matter and crop rotation, B., 917. See also Richardson, H. L.
- Crowther, F., growth analysis of the cotton plant under irrigation in the Sudan. I. Effects of different combinations of nitrogen applications and water supply, B., 73. [Sudan Government] report, 1932-1933, plant physiology section, B., 514.
- Crowther, R. E. See Kodak, Ltd.
- Croxall, W. J., Sowa, F. J., and Nieuwland, J. A., organic reactions with boron fluoride. XI. Condensation of propylene with *m*- and *p*-hydroxybenzoic acids, A., 1358.
- Crucible Steel Co. of America. See Langenberg, F. C.
- Cruellas, J. See Fester, G. A.
- Cruess, W. V., "Tourne" disease of wine, B., 520.
- Cruess, W. V., suggested scoring system for wines, B., 695. Splitting of cherries in brine, B., 698. Marsh, G. L., and Mendels, S., fruit "wines," B., 780. See also Tucker, D. A., and Turbovsky, M. W.
- Cruikshank, E. W. H., and Startup, C. W., action of insulin on the respiratory quotient, oxygen utilisation, carbon dioxide production, and sugar utilisation in the mammalian diabetic heart, A., 127.
- Cruikshank, J. H. See Gray, F. W.
- Crump, L. M. See Cutler, D. W.
- Crumpler, T. B. See Yoe, J. H.
- Crundall, S. F. W. See Spence, H.
- Cruse, A. See Schubert, H.
- Crut, G., effect of hydrogen ions and thrombase on coagulation of fibrinogen, A., 165.
- Cryder, D. S. See Graeber, E. G., and Porter, D. J.
- Cságyó, J., evaluation of bitumens used in road-building on the basis of their absolute viscosity, B., 1028.
- Csesch, H. See Suhrmann, R.
- Csiky, J. S. See Mattson, S.
- Csomay, J. See Gömöri, P.
- Csonka, F. A., proteins of yeast (*Saccharomyces cerevisiae*), A., 898.
- Csűrös, Z. See Zemplén, G.
- Cuban-American Manganese Corporation. See Weinig, A. J.
- Cuccodoro, B., goatskin: identification and recognition, B., 468.
- Cucuel, F. See Stock, A.
- Cuculescu, I., sour-apple [beverage], B., 780. Composition of leaves and leaf stems of tea, B., 826.
- Cuculescu, V., sugar grass (*Sorghum saccharatum*), A., 551.
- Cuisinier, H., pyrocatechol developer without sulphite, B., 574.
- Culbert, R. C. A. See Patterson, W. S.
- Culbert, R. W., vapour pressure of human blood by Hill's thermo-electric method; apparatus and technique, A., 879.
- Culbertson, C. C. See Thomas, B. H.
- Culbertson, J. B., Albright, R., Baker, Drew, and Sweitzer, P., steric hindrance as a factor in the hydrolytic stability of aromatic ketimines, A., 1371.
- Bieber, P., and Zavodsky, A., strengths of phenolic ketimines and their methyl ethers as bases, A., 166. and Davis, B., preparation and properties of furyl phenyl ketimine, A., 220.
- Culbertson, J. W., and Wilson, H. V., effect of physico-chemical changes in environment on embryo formation in the frog, A., 1021.
- Cullen, W., and Durant, H. T., separation of solids from liquids—thickening, B., 289.
- Cullinane, N. M., and Padfield, H. J. H., diphenylene oxide series. V., A., 1247. See also Wood, R. G.
- Cullison, J. S., and Muilenburg, G. A., meteorite from Lanton, Howell County, Missouri, A., 324.
- Culpepper, C. W., Caldwell, J. S., and Moon, H. H., physiology of development and ripening in the strawberry, A., 1177. and Moon, H. H., composition of the developing asparagus shoot in relation to its use as a food product and as material for canning, B., 821.
- Cumley, R. W., negative stains in the demonstration of bacteria, A., 788.

- Cummings, A. D. See Jessup, R. S., and McPherson, A. T.
- Cummings, M. B., Jenkins, E. W., and Dunning, R. G., root stock effects with cherries; seed and phyton propagation, A., 264.
- Cummins, A. B., and Celite Corp., decolorising and clarifying mineral oils and other liquids, (P.), B., 210.
- Cummins, F., vertical gas-retort settings, (P.), B., 9.
- Cummins, J. E., tests of the efficacy of the oxy-acetylene scouring and charring process for sterilising partly decayed poles, B., 950.
- and Dadswell, H. E., selection, preservation, distribution, and identification of Australian pole timbers, B., 950.
- and Wilson, H. B., starch content of Australian hardwoods in relation to their susceptibility to attack by the powder post borer (*Lyctus brunneus*, Stephens), B., 728.
- Cunliffe, P. W., photography in wool research, B., 843.
- Cunningham, G. E., new interpretation of the adsorption isotherm, A., 441.
- Cunningham, G. L., MacMullin, R. B., and Mathieson Alkali Works, Inc., sodium sesquicarbonate, (P.), B., 991.
- Cunningham, I. J., sugar-cane molasses; a source of assimilable calcium and magnesium for animals, B., 44.
- and Hopkirk, C. S. M., dietary protein in relation to sterility, A., 1403.
- Cunningham, J. P. See Rule, H. G.
- Cunningham, J. T., and Smart, W. A. M., structure and origin of corpora lutea in some of the lower vertebrata, A., 105.
- Cunningham, O. C., and Addington, L. H., value for milk production of lucerne hay injured by sulphur dioxide, B., 1021.
- Cunningham, O. D., and Reilly, P. C., inhibitors [for use in pickling steel], (P.), B., 907.
- See also Derby, I. H.
- Cunningham, R. H., and Bryant Electric Co., composite material, (P.), B., 321.
- Cunnold, F. A. See Milford, M.
- Cupples, H. L., wetting and spreading properties of aqueous solutions; oleic acid-sodium hydroxide mixtures, B., 1129.
- Cuppy, H. A., [pneumatic] classifiers, (P.), B., 658.
- Čupr, V., diffusion potentials. II., A., 936.
- Surfaces of contact between solutions, A., 1325.
- and Širůček, J., aminobenzenesulphonates of bivalent elements, A., 336.
- and Silva, B., hydrolysis of the aluminium benzenesulphonates, A., 934.
- Curd, F. H., and Robertson, A., lichen acids. VI. Constituents of *Ramalina scopulorum*, A., 1501.
- Curie, (Mme.) I., Halban, H. von, jun., and Preiswerk, P., artificial production of elements of an unknown radioactive family by irradiating thorium with neutrons, A., 911, 1050.
- See also Joliot, F.
- Curie, M., hyperbolic law of decay of phosphorescence, A., 1055.
- Curli, G., determination of reducing sugars, B., 519.
- Curran, C. E., Schafer, E. R., and Pew, J. C., colour principle in Western hemlock ground-wood pulp, B., 942.
- See also Billington, P. S.
- Curran, R. A. See Standard Oil Development Co.
- Currie, C. H., sewage-stabilisation apparatus and process for outfall sewers, (P.), B., 384.
- Currie, F. S., sewage-treating apparatus, (P.), B., 432.
- Currie, L. M. See Kip, H. E.
- Currier, L. W., structural relations of southern Appalachian zinc deposits, A., 954.
- Curry, F. S., and Bargaen, J. A., absorption and excretion in segments of the colon in man, A., 1404.
- Curry, H. W., Sayre, F. M., and Internat. Patents Development Co., steeping process [in maize starch manufacture], (P.), B., 649.
- Curry, J., and Trelease, S. F., influence of deuterium oxide on rate of photosynthesis, A., 1177.
- Curti, (Signa.) L. See Sillani, P.
- Curti, R. See Ferrari, A.
- Curtin, L. P., Thordarson, W., and Western Union Telegraph Co., preservation of wood, (P.), B., 1045.
- Curtis, G. See Olmsted, W. H.
- Curtis, G. M., and Phillips, F. J., urinary excretion of iodine. I. Loss of iodine in urine following thyroidectomy, A., 410.
- See also Cole, V. F., Davis, C. B., and Phillips, F. J.
- Curtis, H. A., manufacture of phosphoric acid at Wilson Dam, Ala., B., 766.
- See also Lum, J. H.
- Curtis, H. J. See Fricke, H.
- Curtis, J. T., and Curtis Continental Corp., [electrical] condenser, (P.), B., 316.
- Curtis, R. W., ultrasonic absorption and reflexion coefficients in air and in carbon dioxide, A., 20.
- Curtis Continental Corporation. See Curtis, J. T.
- Curtiss, L. F., brightness meter for luminous preparations, B., 32.
- Curtman, J. J., and Edmonds, S. M., separation and detection of cyanide, A., 596.
- and Schneiderman, H., detection of bromide and its application to systematic analysis of mixtures of thiocyanate, iodide, bromide, and chloride, A., 462.
- Cusa, N. W. See Kipping, F. S.
- Cusin, M. See Soc. Lyonnaise de Soie Artif.
- Custer, W. A., organic compositions [liquid lubricants] and uses therefor, (P.), B., 937.
- Custers, J. F. H., preparation of very thin tungsten wires by sputtering a thicker wire in a gas discharge, A., 321.
- Apparatus for study of light-fastness, B., 267.
- See also De Boer, J. H.
- Čůta, F., iodometric determination of thallic salts by potentiometric and visual titration, A., 463.
- Cuthbert, F. S., and Ivy, A. C., influence of chicken-liver feeding on depauperated dogs, A., 1404.
- and Ivy, A. C., absorption of carbon particles from gastro-intestinal tract, A., 1405.
- Cuthbertson, D. P., and MacLachlan, T. K., treatment of muscular dystrophy with glycine, A., 383.
- Cuthbertson, G. R., and Kistiakowski, G. B., thermal equilibrium between ethylene iodide, ethylene, and iodine, A., 1460.
- Cuthbertson, J. W., ten-kilowatt granular-carbon resistance furnaces, B., 158.
- Cuthbertson, R. E. See Weinig, A. J.
- Cuthill, R., and Jackson, J., determination of ammonia in aqueous hydrogen cyanide solutions, A., 53.
- Cutler, C. H. See Butts, J. S.
- Cutler, D. W., Crump, L. M., and Dixon, A. J., distribution of protozoa in biological filters, B., 256.
- Cutler, F. G. See Haswell, A. B.
- Cutler, G. H., and Brinson, G. A., granulation of whole-wheat meal and method of expressing it numerically, B., 650.
- Cutter, J. See Universal Oil Products Co.
- Cutter, J. O., and Jordan, L. A., mechanism of polymerisation, B., 237.
- See also Jordan, L. A.
- Cutter, J. T., glycolysis in the blood of the goat, A., 1392.
- Cutter, R. D. See Cutting, W. C.
- Cutting, R. A., absorption of glucose and water by the small intestine and colon, A., 654.
- Cutting, W. C., and Cutter, R. D., effect of a low-calorie low-protein diet on blood-proteins, A., 1393.
- Ryland, D. A., and Tainter, M. L., relationship between blood-cholesterol and increased metabolism from dinitrophenol and thyroid, A., 395.
- See also Newman, H. W., and Tainter, M. L.
- Cuvelier, B. V. J., influence of salts on the solubility of double mercuric thiocyanates, A., 441. $\text{Hg}(\text{SCN})_2$ as reagent for cobalt; comparison of $\text{Na}_2\text{Hg}(\text{SCN})_4$, $\text{K}_2\text{Hg}(\text{SCN})_4$, and $(\text{NH}_4)_2\text{Hg}(\text{SCN})_4$, A., 721. Precipitation colorimetry; effect of ammonium chloride on solubility of $\text{ZnHg}(\text{SCN})_4$ and of $(\text{Co}, \text{Zn})\text{Hg}(\text{SCN})_4$, A., 1068.
- Cuyler, W. K., extraction of oestrii from female urine after acidification with various acids, A., 1425.
- Cybulski, K., Sucharda, E., Troszkiewiczówna, C., and Turska, W., sulphonation of aminoquinolines, A., 357.
- Cygler, A. See De la Rivière, R. D.
- Symboliste, M. See Portevin, A.
- Cyr, H. M. See New Jersey Zinc Co.
- Cysouw, H. A. See Kruyt, H. R.
- Czaja, A. T., polarity and growth-promoting substance, A., 672. Root growth, growth-promoting substance, and the theory of its action, A., 672. Action of growth-substance in parallelotropic plant organs, A., 1039.
- Czakó, E., testing properties of combustible gases, (P.), B., 10.
- Czarnecki, J. See Wiertelak, J.
- Czimmer, A. G., digestion of chlorophyll *in vitro*, A., 1433.
- Czolgós, E. P., ground-coat studies. V. Mill additions and consistency, B., 850.
- Czornodola, W. See Malachowski, K.

D.

- Dabrowska, W., formation of crop-milk of pigeons, its composition and importance for the growth of squabs, A., 379.
- D'Achiardi, G., ginorite, a new calcium borate from Sasso Pisano, A., 601.
- Dachniuk, G. H. See Charmandarian, M. O.
- Dack, S. See Gladstone, S. A., and Master, A. M.
- Da Costa, E. See Davis, J. E.

- Da Costa, M. J. B. See Sarmento, A. de M.
- Da Cruz, A., action on fumarase of substances capable of complex salt formation, A., 658.
- See also Jacobsohn, K. P., and Pereira, F. B.
- Dadiou, A., and Engler, W., Raman spectrum of gaseous CD_4 , A., 914.
- Dadlez, J., and Koskowski, W., substances causing fever, particularly dinitrophenol, A., 394. Depressor action of extracts of organs, particularly kidney extract, A., 396. Melanophoric action of extracts of organs, A., 411.
- Dadswell, H. E., and Langlands, I., brittle heart in Australian timbers, B., 150.
- See also Cummins, J. E.
- Dadswell, I. W., inorganic composition of wheat grown in Eastern Australia, A., 796.
- Daevs, K., improvements in weather-resisting steels, B., 855. Good condition of old specimens of iron, B., 994.
- Da Fano, E., gelatinised tars and bitumens, B., 86. Stability of bituminous emulsions, B., 1124.
- Dafert, O. [with Bauer, F., Bauer, M., Capesius, V., and Greifinger, S.], saponins. I. Cyclamin and cyclamiretin. II. Spinatsaponin and [spinat]sapogenin, A., 348.
- [with Capesius, V., and Greifinger, S.], saponins; saponin and sapogenin of *Chenopodium ambrosioides*, L., A., 754.
- Daff, F. S., Robschkeit-Robbins, F. S., and Whipple, G. H., new-formed haemoglobin and protein catabolism in the anemic dog, A., 514.
- Dager, P. W., slips of high sp. gr., B., 804.
- Daggett, A. F. See Brown, W. G.
- Daggett, B. E., smelter gas purification for contact process [sulphuric acid], B., 312.
- Daggs, R. G., lactation. II. Technique for studying lactation in rats, A., 1523.
- and Tomboulou, R. L., lactation. III. Effects of dietary principles on lactation in rats, A., 1523.
- D'Agostino, O., new artificial radioactive elements. I., A., 276.
- See also Amaldi, E.
- Dahl, A. I. See Roeser, W. F.
- Dahl, G. W. See Rubek, D. D.
- Dahl, O., corrosion-resistance of bronzes, B., 500.
- and Pawlek, F., influence of fibre structure and cooling in magnetic fields on magnetisation, A., 813.
- Pawlek, F., and Pfaffenberger, J., magnetic properties of electrolytically-produced iron sheets; effects of grain size, thickness, and additions of arsenic, B., 1050.
- and Pfaffenberger, J., magnetic behaviour of cold-rolled iron-nickel alloys due to separation-hardening; (development of the isoperm), B., 905.
- See also Tuve, M. A.
- Dahlberg, A. C., milk products, (P.), B., 380. Ice cream with high solids, B., 1161.
- Dahlen, M. A. See Du Pont de Nemours & Co., E. I.
- Dahlgren, G. See Euler, H. von.
- Dahm, C. R. See Bang, O.
- Daimon, T. See Hirata, F.
- Dain, B. J., and Pusenkin, E. S., use of hydrolysis of monochloroacetic acid for absolute actinometric measurements, A., 1212.
- Dains, F. B. See Underwood, H. G.
- Dakin, H. D., and West, R., nature of haematopoietic substance occurring in liver, A., 885.
- Dakin, H. P., Fairbrother, F., and Stubbs, A. E., electro-endosmosis. VII. Measurements with non-aqueous liquids and high voltages, A., 1317.
- Dakin, W. J., and Colefax, A. N., plankton production and the nitrate nitrogen and phosphate cycles in the Pacific Ocean off New South Wales, A., 1219.
- Dalal, P. H. See Prasad, M.
- Dalbert, denitration of nitrocotton by diphenylamine during the total-time stability test of reworked powder, B., 831.
- Dale, A. J. See Hind, S. R.
- Dale, (Sir) H. H., chemical transmission of nerve impulses, A., 115. New ergot alkaloid, A., 1256.
- and Feldberg, W., chemical transmitter of vagus effects to the stomach, A., 244.
- See also Brown, G. L.
- Dales, B., and Amer. Anode, Inc., rubber goods [from latex], (P.), B., 322.
- Dalin, G. A. See Crist, R. H.
- Dalin, M. A., and Gntuira, V. S., preparation of alcohol from ethylene obtained from cracked gas. II. Reactivation of active carbon with steam, B., 395.
- Dalke, L. M. See Videla, C. A.
- Dalla Valle, J. M. See Sayers, R. R.
- Daller, W., addition of hydrazine to nickel pyrophosphate, A., 717.
- Dallwitz-Waegner, R. von, surface tension and molecular structure of liquids and solid substances in the light of "space energetics," A., 284.
- Dalmer, O., vitamin-C and chemically related compounds: configuration and antiscorbutic action, A., 547.
- Werder, F. von, Honigmann, H., and Heyns, K., systematic degradation of 3-hydroxyallocholan acid to androstosterone, A., 1370.
- Dalous, E., Fabre, J., Pons, H., and Boulicaud, histochemistry of pigments of organisms producing septicæmia. I. *Bacillus perfringens*, A., 256.
- Dalsace, J. See Gutman, C.
- Dalsimer, P. D. See Morgan, R.
- Dalton, J. B., and Schmidt, C. L. A., solubilities of certain amino-acids and related compounds in water, densities of their solutions at 25°, and calculated heats of solution and partial molar volumes. II., A., 695.
- Daly, R. A., testing a theory of the earth's interior, A., 1343.
- Dam, H., antihæmorrhagic vitamin of the chick, A., 903.
- and Brun, G. C., balance experiments with dihydrocholesterol in rats, A., 653.
- and Starup, U., fate of plant sterols in the animal organism. I. and II., A., 113, 1015.
- See also Schoenheimer, R.
- Dam, W. van, and Burgers, W. G., X-ray investigation of microcrystalline structure of butter fat, B., 462.
- See also Backer, H. J.
- Daman, A. C., classifier, (P.), B., 3.
- See also Logue, L. H.
- Damansky, A. F., esterification of starch and its degradation products, A., 70.
- Dambacher, F., and Houghton & Co., E. F., sulphonated higher alcohol esters of higher fatty acids, (P.), B., 262.
- Damerell, V. R., and Cadle, R., surface behaviour of zeolites, A., 929.
- Dameshek, W., Myerson, A., and Stephenson, C., insulin hypoglycæmia, A., 1422.
- Damianovich, H., compound of platinum and helium; probable size of colloidal particles, A., 1058. Microstructure of platinum after action of helium, oxygen, and hydrogen in the electric discharge, A., 1060.
- Damköhler, G., refraction and dispersion of gases and vapours. VIII. Molecular refraction of argon, krypton, and xenon, A., 13. Determination of krypton and xenon content of atmospheric air, A., 463. Theory of solids at high temperatures, with special reference to the variation of C_p with temperature, A., 1312.
- Damm, H., and Lembke, A., biochemical detection of carbohydrates, polysaccharides, alcohols, glucosides, and other organic compounds, A., 1416.
- Damm, P., formation and composition of coal tar, B., 708. Present position of chemical up-grading of bituminous coal, B., 755.
- See also Biltz, H.
- Damme, J. van. See Delrue, G.
- Damodaran, M., and Ananthanarayanan, K. G., is there a racial factor in metabolism? A., 1399.
- and Srinivasan, M., vitamin-C content of some Indian plant materials, A., 1036.
- Damon, G. H., fluorescence of gaseous acetone as test for traces of oxygen, A., 595. Use of colloidal cobaltinitroso- β -naphthol in a general chemistry experiment, A., 1072.
- Damon, W. A., stability of sodium methylxanthate, B., 760. Determination of oxides of nitrogen, excluding nitrous oxide, B., 766.
- Damoose, N. G. See Eldridge, E. F.
- D'Amour, F. E., Dumont, C., and Gustavson, R. G., no anti-hormones against oestrin, A., 413.
- Damova, P. See Balarev, D.
- Damsgaard-Sørensen, P., hydroxyapatite precipitation as basis for volumetric determination of phosphoric acid in solutions containing calcium, A., 718.
- and Unmaek, A., determination of dissociation constant of tri-*n*-butylamine, A., 581.
- Dănila, N., and De Bie, C. N., preparation of ethylene from high-boiling petroleum fractions by cracking under reduced pressure, B., 709.
- Danckwort, P. W., toxicity and fluorescence of vetch seeds, B., 876. Derris preparations. II. Evaluation of derris roots and stability of rotenone in commercial preparations, B., 1117.
- [with Dietrich, W., and Wilkens, G.], behaviour of drugs at high oxidation potentials; Tillmans' chloramine value, B., 1068.
- Dandini, A. O., coloured building blocks, (P.), B., 994.
- Dandres, R. See Chaudron, G.
- Danehy, J. P., Vogt, R. R., and Nieuwland, J. A., reaction of ethylene oxide with acetylenic Grignard reagents, A., 193.
- Danforth, C. H., and Fisher, J. K., failure of testicular hormone to masculinise plumage and eye-colour of female Brewer's blackbird, A., 1426.

- Danforth, C. H., and Price, J. B., failure of theelin and thyroxine to affect plumage and eye-colour of the blackbird, A., 1426.
- Dangelmajer, C. See Du Pont de Nemours & Co., E. I.
- Dangers, H. W., properties of silver halides optically by ultrasonic waves in gelatin, A., 1459.
- Dangschat, G. See Fischer, H. O. L.
- Daniel, C. M., and Fletcher, W. A., new azo-derivatives of guaiacol. I., A., 1489.
- Daniel, D. M. See Cox, J. A.
- Daniel, H. A., and Harper, H. J., relation between total calcium and phosphorus in mature prairie grass and available plant food in the soil, B., 325. Relation between effective rainfall and total calcium and phosphorus in lucerne and in prairie hay, B., 1110. See also Harper, H. J., and Murphy, H. F.
- Daniel, J. See Abramson, H. A.
- Daniel, W. See Hein, F.
- Danielli, J. F., thickness of the wall of the red blood-corpuscle, A., 1517.
- and Davson, H., theory of permeability of thin films, A., 1012.
- and Harvey, E. N., tension at surface of mackerel-egg oil: nature of cell surface, A., 1012. See also Adam, N. K.
- Daniels, A. L., Hutton, M. K., Knott, E. M., Wright, O. E., Everson, G. J., and Scoular, F., protein requirement of pre-school children, A., 652. See also Everson, G. J.
- Daniels, C. E., inductive electric heating, B., 772.
- Daniels, E. J., factors influencing formation and structure of hot-dipped tin coatings, B., 996.
- Daniels, F., photons in chemistry and biology, A., 1023.
- Daniels, F. C. T., locally hardened molybdenum steel, (P.), B., 907.
- Daniels, F. H., Nahigyan, K. K., and Riley Stoker Corp., gas scrubber, (P.), B., 611.
- Daniels, L. C., Jaeger, A. O., and Amer. Cyanamid & Chem. Corp., [nickel] salts of keto-aromatic acids, (P.), B., 841. See also Jaeger, A. O., and Selden Res. & Eng. Corp.
- Daniels, T. C. See Kumler, W. D.
- Danielson, R. R., and Tetrick, J. D., viscosity and reboiling of blue ground-coats [enamels], B., 149.
- Daniewski, W., formation of emulsions under the influence of ultrasonic waves, A., 296.
- Danilov, A., Koriakina, A. F., Kossovskaja, E., Krestovnikov, A., and Fomičov, A., influence of phosphate on distribution of water and salts in muscular work, A., 239.
- Danilov, S. N. [with Driabchiltzin, V., and Manochina, O.], benzyl ethers of ethylene glycol and glycerol, A., 1481.
- and Brochina, D. S., thioanhydrides of cellulosexanthic acid, A., 202.
- and Miras, L. I., lowering viscosity of cellulose nitrate. I. Action of strong and weak bases, A., 31.
- and Sviridovskaja, R., influence of carbon monoxide on hydrogenation of fats, B., 415.
- Danilov, V. I., and Egorov, K. E., determination of heat conductivities of varieties of pumice concrete, B., 1096.
- Danilov, V. I., Finkelstein, V. S., and Sirotenko, D. J., scattering of X-rays in solutions of heavy molecules and structure of complex ions, A., 1061.
- and Sirotenko, D. J., determination of heat-conductivities of spongy varieties of pumice stone, B., 1096.
- Danilova, A. K. See Chlebnikov, N. I., and Solun, A. S.
- Daniltschenko, P. T., and Ediger, V. G., systems metal nitrate-acetamide, A., 582.
- Danini, E. M., and Kosmortov, V. A., course of nitrification in alkali soils, B., 1156.
- Daniushevski, E. E., measurement of small differences in thermal expansion coefficients of glasses, B., 453.
- Dankova, T. F. See Berkenheim, A. M.
- Danks, F. S., wood preservation, B., 357.
- Dann, M., and Cowgill, G. R., vitamin-C requirement of the guinea-pig, A., 1286.
- Dann, W. J., transmission of vitamin-A from parents to young in mammals. IV. Effect of liver reserves of the mother on transmission of vitamin-A to the foetal and suckling rat, A., 415.
- Moore, T., Booth, R. G., Golding, J., and Kon, S. K., new spectroscopic phenomenon in fatty acid metabolism; conversion of "pro-absorptive" into "absorptive" acids in the cow, A., 241. See also Booth, R. G.
- Danneel, R., biological detection of abietic acid and parent substances; sulphite-cellulose effluent, A., 394.
- Dannenbaum, H. See Butenandt, A.
- Danner, P. S. See Standard Oil Co. of California.
- Dannöhl, W. See Eucken, A.
- D'Aus, J., and Jäger, A., ripeness determination of viscose solutions, B., 587.
- Dansi, A. See Cook, James Wilfred.
- Dantszen, C. See Gen. Elec. Co.
- Dantuma, R. S., and Mees, A. M., relative tautening effects of cellulose acetate and nitrate dopes [for aeroplane fabric], with reference to influence of moisture, B., 775.
- Danyasz, M., Rotblat, J., Wertenstein, L., and Żyw, M., Fermi effect, A., 141.
- Daoud, K. M., and Tadros, W., mechanism of inter-conversion of hexose sugars in living organisms, A., 420.
- Darányi, J. von, and Vitéz, S. von, physiological action of substances used in treatment of flour, A., 529.
- Darbshire, F. V., and Tincker, M. A. H., influence of soil factors on growth of vegetables, B., 326.
- Darby, G. M., and Dorr Co., Inc., beet sugar [from molasses], (P.), B., 1064.
- Darbyshire, J. A., and Cooper, E. R., diffraction of electrons by oxide films on molten metals, A., 18. Camera for electron diffraction, A., 189.
- Darkis, F. R., Dixon, L. F., and Gross, P. M., flue-cured tobacco, B., 1164.
- Darlington, C. J. See Du Pont de Nemours & Co., E. I.
- Darlow, A. E. See Long, J. E.
- Darmois, E., heavy hydrogen (deuterium) and its compounds, A., 1332.
- and Heng, Y. K., strength of acids, A., 33.
- and Peychès, I., behaviour [rotation] of benzylamine tartrate in acetic acid, A., 1447.
- Daron, A. See Nottin, P.
- Darrah, W. A., [case-hardening] treatment of metal [iron], (P.), B., 503.
- Darrow, D. C., and Yannet, H., changes in distribution of body-water accompanying increase and decrease in extracellular electrolyte, A., 1404.
- Yannet, H., and Carey, M. K., physiological disturbances during experimental diphtheritic intoxication. IV. Blood-electrolyte and -haemoglobin concentrations, A., 383.
- Darrow, K. K., nuclear chemistry, A., 426.
- Darrow, M. A. See Conn, H. J.
- Darruty, C. A., chemistry of folliculin, A., 666.
- Darsey, V. M., preparation of iron and steel for painting, B., 1146.
- Dartois, E. See Nottin, P.
- Darzens, G., and Lévy, A., fluoro-derivatives of butyltoluene and of butyl-m-xylene; fluoronitro-derivatives with the odour of musk, A., 74. Synthesis of tetrahydronaphthalene-carboxylic acids and naphthalenic hydrocarbons, A., 81. Synthesis of a methyl-tert.-butyl-naphthalene and -naphthoic acid, A., 342. Synthesis of a methoxymethyltetrahydronaphthoic acid, the corresponding naphthoic acid, and of 8-methyl-β-naphthol, A., 618. Synthesis of hydrogenated derivatives of phenanthrene and of phenanthrenic hydrocarbons, A., 975. Interaction of organomagnesium compounds with naphthalene- and phenanthrene-carboxylic esters, A., 1234.
- Das, N., and Guha, B. C., inositol. I. Oxidation by rat-tissue, A., 658. Chemistry of oxytocin (the oxytocic hormone of the pituitary gland). IV. Action of nitric and nitrous acids and sulphur dioxide: extraction with pyridine, ethyl alcohol, chloroform, and acetone, A., 1424. See also Guha, B. C.
- Das-Gupta, G. C. See Sen, H. K.
- Das-Gupta, H. N., heterocyclic compounds containing arsenic in the ring, A., 1515.
- Das Gupta, H. P., and Subrahmanian, V., preparation of starch from indigenous grains and tubers, B., 284.
- Das-Gupta, S. See Mitter, P. C.
- Das-Gupta, S. S. See Datta, R. L.
- Dasannacharya, B., Chiplonkar, V. T., and Sapre, L. G., ring deposits on glass by positive-ray bombardment, A., 1469.
- Daschevski, M. M. See Kiprianov, A. I.
- Da Silva, A. M. See Grinberg, B.
- Da Silva, D. J., m.-p. diagram of the system *p*-cresol-benzoic acid, A., 35.
- Dassen, R., and Del Castillo, E. B., basal metabolism and iodine content of the blood in myelogenous leucemia: influence of di-iodotyrosine, A., 887.
- Dastur, N. N., Karnad, R., Sastri, B. N., and Venkatasubban, A., determination of urea, A., 1552.
- Dastur, R. H., and Desai, R. M., carbon dioxide: carbohydrate ratio in aerobic and anaerobic respiration of rice, A., 548.
- and Gunjikar, L. K., effect of elliptically-polarised light on formation of carbohydrates in leaves, A., 132.
- and Kanitkar, U. K., microchemical test for protein-grains in plant-cells, A., 905.
- and Mehta, R. J., effect of blue-violet rays on photosynthesis [in plants], A., 1547.
- Datar, S. N., densities of aqueous solutions of formaldehyde between 20° and 40°, A., 817.

- Datta, A. K. See under Dutta, A. K.
- Datta, N. C., lipin metabolism. I. Variation in cholesterol content of blood and of different organs in pigeons consequent on administration of chloroform, A., 1155. Metallic contamination of foods. I. Preparation and storage in tinned-brass vessels. II. Effect of cooking and storage of foodstuffs in aluminium vessels, B., 122, 1162.
- and Banerjee, B. N., nutritive value of milk and milk products. I., B., 825.
- Datta, R. L., and Das Gupta, S. S., optimum detergency in blended washing soaps, B., 596.
- Datta, S., colour of paramagnetic crystals and solutions of the iron group, A., 1051.
- and Chakroborti, B., determination of the heat of dissociation from a study of the long wave-length limit of the continuous absorption by gaseous molecules, A., 570.
- and Chatterjee, K., long and short spectral lines, A., 908.
- Daub, G., and Gugler Lithographic Co., press plates, (P.), B., 334.
- Daubner, W., volumetric determination of magnesium, A., 1216. Volumetric determination of aluminium, A., 1338.
- Daubney, C. G., determination of small quantities of chlorine in commercial benzaldehyde, B., 261.
- Daudt, H. W., and Kinetic Chemicals, Inc., purification of organic fluorine compounds, (P.), B., 218.
- See also Du Pont de Nemours & Co., E. I.
- Daum, K. See Ohlson, M. A.
- Dauncey, W. R. See White, R. J.
- Daur, R. See Fuchs, W.
- Dauvillier, A., determination of atmospheric ozone, A., 1472.
- Davenport, E. S., and Bain, E. C., grain size, hardenability, and normality of steels, B., 549.
- Davenport, H. A. See Swank, R. L.
- Davenport, J. E. See Evans, R. N.
- Davenport, L. F., Fulton, M. N., Van Auker, H. A., and Parsons, R. J., creatinine clearance as measure of glomerular filtration in dogs, with particular reference to effect of diuretic drugs, A., 106.
- Davenport, R. W., and Chicago Pneumatic Tool Co., refrigerant composition, (P.), B., 1074.
- Davey, N., measurement of pressure exerted by a material maintained at constant length when it absorbs moisture, B., 1. Liberation of heat during hydration of concrete, B., 102.
- Davey, W. P. See Singer, W. E.
- Davey, W. S. See Rubber Producers Res. Assoc.
- David, K., and De Jongh, S. E., biological properties of equilin, A., 542.
- Dingemans, E., Freud, J., and Laqueur, E., crystalline male hormone from testes (testosterone), more active than androsterone prepared from urine or from cholesterol, A., 1033.
- David, L., determination of alkaloid in ipecacuanha roots, B., 1117.
- David, L. M. M. See Theillier, F. E.
- David, R. See Régnier, J.
- David, W. T., spectra and latent energy in flame gases, A., 138. Sodium line-reversal method of determining flame temperatures, A., 465. Flame temperatures, A., 598. Flame temperatures and explosion pressures, A., 1080.
- Davidenkoff, N. N., allowable working stresses under impact, B., 153.
- Davidov, A. L. See Zanko, A. M.
- Davidov, B. I., diffusion equation with consideration of molecular velocity, A., 1313.
- Davidovskaja, E. A. See Sementschenko, V. K.
- Davidsohn, A., titration flask facilitating observation of colour changes, A., 599.
- Davidsohn, J., chlorinated rubber, B., 685.
- Davidson, A. See Imperial Chem. Industries.
- Davidson, A. W., solutions of electrolytes, A., 443.
- and Griswold, E., amphoteric acetates in acetic acid as solvent, A., 583.
- and Holm, V., transfer of ions in anhydrous acetic acid solution, A., 825.
- Davidson, C. F., geology of Raasey, Inner Hebrides, A., 1479.
- See also Walker, Frederick.
- Davidson, D., and Bogert, M. T., preparation of aromatic alcohols by the crossed Cannizzaro reaction with formaldehyde, A., 972.
- See also Roblin, R. O., jun.
- Davidson, E. M., magnetic material, (P.), B., 911.
- Davidson, E. P., vat dyeing in package machines, B., 765.
- Davidson, J., apple thrips (*Thrips imaginis*, Bagna 11), B., 1062.
- and LeClerc, J. A., determination of acid-base balance in food materials, A., 554.
- Davidson, J. A. See Rabinovitch, I. M.
- Davidson, J. C. B., improvement of refining quality of raw sugars, using electrical conductivity control, B., 693.
- Davidson, J. G. See Carbide & Carbon Chemicals Corp.
- Davidson, L. T., and Meritt, K. K., viosterol in the prophylaxis of rickets in premature infants, A., 386.
- Davidson, N. N., Kolesnikov, A. F., and Fedorov, K. V., formation of twin crystals of zinc, A., 572.
- Davidson, O. W., Clark, H. E., and Shive, J. W., preparation of aqueous extracts of soluble nitrogen from plant tissues, A., 269.
- and Shive, J. W., determination of nitrogenous fractions in vegetative tissue of the peach, A., 905.
- Davidson, R. H. See Howard, N. F.
- Davidson, W. M. See Watson, Cyril J.
- Davie, P., and Cammen, L., selective separation of liquids from other commingled liquids, suspensions, sludges, dispersions, etc., (P.), B., 658.
- See also Cammen, L.
- Davies, A., treatment of rubber, gutta-percha, and balata, (P.), B., 241.
- See also Dewsbury, W. G.
- Davies, A. E. See Thompson, H. H.
- Davies, A. H., composition of matter and treatment [therewith] of molten metals [steel], (P.), B., 235.
- Davies, A. W., and Moore, T., vitamin-A and carotene. XII. Elimination of vitamin-A from livers of rats previously given massive doses of vitamin-A concentrate, A., 261.
- Davies, B., detection of added water in milk, B., 873.
- Davies, B. L., accelerators [of vulcanisation] in hard rubber [ebonite], B., 34. Rational compounding of ebonite stocks, B., 196. Discoloration and transparency in vulcanised rubber, B., 467.
- Davies, C., determining surface area of trees covered by spray fluid and obtaining a permanent record of degree of fineness of the deposit, B., 247.
- Davies, C. W., reaction of malonic acid with metallic bases, A., 1077.
- See also Macdougall, G.
- Davies, D. B., apparatus for bleaching of chemical wood pulp, (P.), B., 97. Bleaching wood pulps, (P.), B., 624.
- Davies, D. G. See Edwards, C. A.
- Davies, D. Gwynne, specific heats of isobutyric acid-water mixtures at 15°, A., 1200.
- Davies, D. T., and Wilkins, E. T., flocculation of slurries; continuous clarification of a coal-washery circuit with glue, B., 291.
- See also Mitton, H. E.
- Davies, D. W., continuous vertical retorts for small [gas] undertakings, B., 612.
- Davies, E. A., distillation of tar, (P.), B., 88.
- Davies, E. C. H. See Sutton, J. B.
- Davies, E. R., and Owen, R. E., visual photometer for measurement of transmission and reflexion densities, B., 382.
- Davies, E. S., and Hartshorne, N. H., identification of aromatic nitro-compounds by optical crystallographic methods, A., 102.
- Davies, F. R., superiority of silver nitrate over mercuric chloride for surface sterilisation in the isolation of *Ophiobolus graminis*, Sacc., A., 1540.
- Davies, H., [highly] porous ceramic objects, (P.), B., 769.
- Davies, I. A. See Imperial Chem. Industries.
- Davies, J. A. See Carbide & Carbon Chem. Corp.
- Davies, J. G., Scott, A. E., and Fraser, K. M., natural pastures: their response to super-phosphate, B., 167.
- Davies, J. S. H. See Imperial Chem. Industries.
- Davies, L. J. See Brit. Thomson-Houston Co.
- Davies, M. M., conductivities of acids and other solutes in pyridine, A., 1462.
- Davies, R. J., clay and opacity [of paper], B., 143.
- See also English Clays, Lovering, Pochin & Co., Ltd.
- Davies, R. O., and Chippendale, H. G., response of grasses and clover to treatment on acidic upland soils: effect of herbage plants on reaction of acidic soils. I. II. Effect of herbage plants on *Molinia* soil, B., 245, 777.
- See also Fagan, T. W.
- Davies, W., catalytic combustion at high temperatures, A., 455.
- Davies, W. B., dry-cleaning of steam coal in South Wales, B., 389.
- Davies, W. C., preparation of *p*-substituted dialkylanilines, A., 614. Mesityldimethylphosphine, A., 768.
- Davies, W. H., Heilbron, I. M., Jones, William E., and Lowe, A., studies in the synthesis of vitamin-A. I., A., 978.
- Davies, W. L. See Jones, T. S. G., and Strachan, J.
- Davies, W. M., and Owen, G., soil survey of north Shropshire. II. Classification of series and types, B., 242.
- Davies, W. T. See Chadwick, J.

- Davis, A. B., Thompson, J. F., Gardner, A. T., and Alsted, L. L., recovery of pulp from printed paper, (P.), B., 846.
- Davis, A. C., and Young, H. D., sulphur fumigation for control of mushroom pests, B., 969.
- Davis, B. See Culbertson, J. B.
- Davis, B. L., jun., Hinsey, J. C., and Markee, J. E., constituents in normal urine producing hyperglycemia previously attributed to prolan, A., 259.
- See also Luck, J. M.
- Davis, C., and Farrer, W. G., liquid-clarifying apparatus, (P.), B., 788.
- Davis, C. B., Curtis, G. M., and Cole, V. V., blood-iodine. II. Normal iodine content of human blood, A., 231.
- Davis, C. F., forced draught as aid in air-oven moisture tests, B., 1114.
- Davis, Charles W., rapid practical method of demagnetisation involving high frequency, A., 839. Magnetic properties of mineral powders and their significance, A., 1310. Geological significance of magnetic properties of [iron] minerals, A., 1347.
- See also Gottschalk, V. H., and Sloan, W. A.
- Davis, Clark W. See Du Pont de Nemours & Co., E. I.
- Davis, D. See Blumgart, H. L., and Gilligan, D. R.
- Davis, D. S., nomograph for the thermal value of bituminous coal, B., 483.
- See also Lary, E. C., and Perry, J. H.
- Davis, F. K., and Ross Heater & Manufg. Co., recovery of desirable [liquefiable] constituents of a gas or vapour mixture, (P.), B., 338.
- Davis, F. L., deviation of yields from duplicate pot cultures, B., 167.
- Davis, G. H. B. See Standard-J. G. Co., and Standard Oil Development Co.
- Davis, G. K. See Madsen, L. L.
- Davis, H., preparation of sterile solutions, B., 252.
- Davis, H. A., relation of water and electrolytes to metabolism, A., 1012.
- Davis, H. H., and Johnson & Co., Ltd., S. H., pumps for filter-presses, etc., (P.), B., 51.
- See also Hooton, A. J. S.
- Davis, H. J., and Norris, L. C., effect of process of manufacture on vitamin-B₂ content of dried skim-milk, A., 416.
- Davis, H. M. See Glockler, G., and Heisig, G. B.
- Davis, I., reclamation of silk [from old fabrics], (P.), B., 350.
- Davis, J. D., and Auvil, H. S., high-temperature carbonisation of coal; effect of free space above the charge on yields and properties of gases and tars, B., 580. Electrical conductivity of coke, B., 1079.
- See also Fieldner, A. C.
- Davis, J. E., Da Costa, E., and Hastings, A. B., effect of thyroxine on tissue metabolism of excised frog heart, A., 540.
- and Hastings, A. B., oxygen consumption of immature rats, A., 370.
- Davis, J. G., biochemical aspects of cheese-ripening, B., 781. Ropy milk, B., 1115.
- Davis, J. J., codling-moth control tests, B., 1014.
- Davis, J. W., and Atmospheric Nitrogen Corp., temperature control [in ammonia synthesis], (P.), B., 494.
- Davis, K., and Peale-Davis Co., mechanism for separating intermixed divided materials, (P.), B., 83, 578.
- See also Peale, Rembrandt.
- Davis, L., relation of the pituitary, hypothalamus, and the autonomic nervous system to carbohydrate metabolism, A., 902.
- Davis, L. E., phosphate fixation in Hawaiian soils. III., B., 373. Sorption of phosphates by non-calcareous Hawaiian soils, B., 966.
- Davis, M. B., balanced fertiliser practice as an aid to better keeping quality of fruit, B., 246.
- See also Hill, Hinson.
- Davis, M. N., instrumentation in brightness grading [of paper], B., 846.
- Roehr, W. W., and Malmstrom, H. E., instrument for formation measurement [of paper], B., 846.
- Davis, R. F., conveyance of solid particles by fluid suspension, B., 833.
- See also Universal Oil Products Co.
- Davis, (Sir) R. H., and Levy, L. A., filtering media for separating smokes, dusts, etc., from gases and vapours, (P.), B., 5.
- Adsorbent cuprene, (P.), B., 13.
- Davis, R. K. See Gilman, H.
- Davis, R. O. E., Scholl, W., and Miller, R. R., high-nitrogen [fertiliser] material from urea-ammoniated peat, B., 602.
- See also Scholl, W., and Yee, J. Y.
- Davis, T. L., and Armstrong, (Miss) C. B., pyrylium derivatives by condensation of saturated ketones, A., 1376.
- and Heggie, R., asymmetric synthesis. II. Addition of bromine to an ethylenic linking. II. Addition of chlorine to trinitrostilbene, A., 480, 1358.
- See also Greenberg, B. E.
- Davis, W. N. See Standard Oil Co. of California.
- Davis, W. S., jun. See Standard Oil Development Co.
- Davison, E. H., geology of Castle-an-Dinas wolfram mine, Cornwall, A., 1344.
- Davisson, C. J. See Calbick, C. J.
- Davisson, J. W. See Finch, G. B.
- Davson, H. See Danielli, J. F., and Duke-Elder, W. S.
- Davtjan, E. A. See Shultz, R. E. S.
- Davuidov, G. K., heat of wetting of soils. I. Effect of neutral salts. II. Effect of soil saturation with different cations, B., 71.
- Davuidov, G. V., X-ray study of transition of austenite into martensite during the working process, B., 151.
- Davy, A., and Huggett, A. St. G., autolysis of placental glycogen, A., 122.
- Davy, C. H., modern methods of welding, B., 1050.
- Davy, L., factors to be considered in immature female rat titration of pregnancy urine, A., 1425.
- Dawans, A., and Denoël, L., heat-resistant cast iron, B., 676.
- Dawihl, W., resistance of enamel vessels to boiling and acids, B., 22. [Preparation of alumina and zirconium at high temperatures], B., 305. Dielectric measurement of combined water in lime paste, B., 543. Solubility of clouding agents in enamel. I. Solubility of cryolite, B., 630. Determination of small quantities of fluorine in enamel, B., 850. Determination of the heat-conductivity of enamel, B., 901.
- Dawson, C. R. See McBain, J. W.
- Dawson, D. H. See Johnston, H. L.
- Dawson, F. M. See Knechtges, O. J.
- Dawson, H. M., origin of bromine liberated as bromide ion in interaction of bromoacetic ions with bromoacetic molecules, A., 452. Influence of ionic environment on dissociation of weak electrolytes, A., 823.
- Dawson, I. R. See Kempf, L. W.
- Dawson, L. H., removal of gaseous impurities from [gas-filled] electric-discharge tubes, (P.), B., 415.
- Dawson, P. R., determination of sp. gr. of coal gas, B., 341.
- See also Jordan, H. V.
- Dawson, R. T. See Hopper, I. V.
- Dawson, T. R., zinc sulphate ammine [vulcanisation] accelerator, B., 112. Sprayed rubber. I. Comparison of Hopkinson, Wickham, para, crêpe, and smoked sheet rubbers, B., 737.
- Day, A. A. See Moore, M. L.
- Day, A. R. See Patterson, J. A., jun.
- Day, C. D. M., and Sedgwick, H. J., fat-soluble vitamins and dental caries in children, A., 236.
- Day, E. L. See Lane, R. P.
- Day, F. B. See Bannister, A. R.
- Day, F. E. See Hopkins, R. H.
- Day, L., building-construction material, (P.), B., 24.
- Day, L. G., and Brit. Maxium, Ltd., [die-] casting of magnesium and its alloys, (P.), B., 680. Melting and refining of magnesium and its alloys prior to casting, (P.), B., 680.
- Dayton, R. W., theory and use of the metallurgical polarisation microscope, B., 501, 1146.
- Dayton Synthetic Chemicals, Inc. See Thomas, C. Allen.
- Dazert, A. A. H. E. See Waterman, H. I.
- De, H. P., state of polarisation of continuous X-rays from a thin aluminium anti-cathode, A., 1439.
- De, N. K., spectrographic examination of some Indian milks, A., 1398. Spectrographic study of vitamin-A content of some oils and fats, A., 1428.
- See also Sankaran, G.
- Deaglio, R., temperature coefficient of electrical conductivity in thin metal films, A., 20. Crystal photo-effect with single crystals of cuprite, A., 430. Unipolar interior conductivity of certain crystals, A., 809.
- Dean, D. K., and Cameron, G. M., steam accumulators in paper mills, B., 942.
- and Foster Wheeler Corp., gas purification, etc., (P.), B., 88.
- Holder, G. C., and Foster Wheeler Corp., cooling of liquid, (P.), B., 1122.
- Dean, F. E. See Herring, G. E.
- Dean, G. A. See Schenk, G.
- Dean, Hartzell C., and Smith, F. B., effects of potassium and crop residues on available potassium in some alkali soils of Iowa, B., 1010.
- See also Smith, F. B.
- Dean, H. K. See Banks, A.
- Dean, Harold L., and Smith, F. B., effect of lime and phosphate on nitrification in an acid soil, B., 1010.
- and Walker, R. H., comparison of glass and quinhydrone electrodes for determining the [H⁺] of some Iowa soils. I. Comparison of different types of glass electrodes. II. Variability of results. III. Change of p_n in soil-water mixtures with time, B., 917, 1059.

- Dean, *Harold L.* See also *Smith, F. B.*
- Dean, *H. T.*, *Sebrell, W. H.*, *Breaux, R. P.*, and *Elyvove, E.*, effect of various amounts of sodium fluoride on the teeth of white rats, A., 399.
- Dean, *J. G.* See *Wooster, C. B.*
- Dean, *R. S.*, direct production of iron and steel from ore, B., 103, 548. Direct production of wrought iron, B., 103.
- Barrett, *Edward P.*, and *Pierson, C.*, sponge iron and properties of direct steel made from it, B., 1144.
- and *Hersberger, A. B.*, new flotation reagents, B., 312.
- and *Koster, J.*, electrical properties of mineral aggregates. I. Natural and artificial aggregates of crystallised lead sulphide, A., 1303.
- See also *Maier, C. G.*
- Dean, *R. W.* See *Chapman, P. J.*
- Dean, *W. A.* See *Aluminum Co. of America.*
- Deanesly, *R.* See *Callow, R. K.*
- Deanesly, *R. M.*, halogenation inhibition by oxygen, A., 62.
- See also *Bataafsche Petroleum Maats.*, and *Shell Development Co.*
- De Angelis, *V.* See *Imbesi, A.*
- Dearborn, *R. B.* See *Phillips, T. G.*
- Dearing, *M. C.*, and *Economy Fuse & Manufg. Co.*, urea-formaldehyde reaction products, (P.), B., 1057.
- Dearing, *W. C.* See *Hovorka, F.*
- Deasy, *D.* See *Drew, J. P.*
- Deb, *S. C.*, absorption spectra of lead halide vapour, A., 562.
- See also *Datta, A. K.*
- De Barbieri, *A.*, presence of the protective hormone in urine, A., 1268. Liver and cerebral function, A., 1271. Cortical hormone and vagal excitability, A., 1283.
- De Bats, *J. H. L.*, [hard] alloys [of tungsten, etc.], (P.), B., 157.
- De Baufre, *W. L.*, rectifier construction for separating mixed fluids, (P.), B., 5.
- De Beer, *E. J.*, wash-bottle for quantitative work, A., 321.
- Buck, *J. S.*, and *Hjort, A. M.*, relative anaesthetic effects; aliphatic ureas, A., 118.
- and *Hjort, A. M.*, relative anaesthetic effects; urea derivatives, A., 118. Employment of potassium ferrocyanide in standardisation of dilute potassium permanganate, A., 597.
- Johnston, *C. G.*, and *Wilson, D. W.*, composition of intestinal secretions, A., 379.
- See also *Buck, J. S.*, and *Hjort, A. M.*
- De Belsunce, *G.*, vitamins and fatty substances, B., 732.
- Debenedetti, *E.*, striations in warp of acetate textiles delustrated in boiling baths, B., 449.
- De Benedetti, *S.*, production of positrons in different elements, A., 803. Absorption measurements on cosmic rays at 11° 30' geomagnetic latitude and 2370 metres elevation, A., 1297.
- See also *Rossi, B.*
- De Berry, *C. R.*, and *Taylor, H. W.*, electrical insulating materials, (P.), B., 275.
- De Beukelaer, *F. L.* See *Christopher, E. F.*
- De Beus, *J.* See *Reith, J. F.*
- De Bie, *C. N.* See *Danaila, N.*
- Debiesse, *J.* See *Lemarehands, M.*
- De Blicquy, *J.* See *Callebaut, C.*
- De Boer, *F.*, position of the separation quadruple point in the system ether-water, A., 35.
- See also *Pelt, A. J. van, jun.*
- De Boer, *J.* See *De Haas, W. J.*
- De Boer, *J. H.*, relationship between photo-electric conductivity, light absorption, and photographic properties, A., 808. Electronic conductance as a result of the non-stoichiometric composition of substances, A., 1303.
- Custers, *J. F. H.*, and *Dippel, C. J.*, light absorption of adsorbed caesium, A., 2.
- and *Geel, W. C. van*, asymmetric conductivity of an electrode system: metal-salt-adsorbed alkali metal, A., 682. Red threshold of inner photo-effect and emission work for semi-conductors, A., 682.
- Junker, *J. L. H.*, *Gessel, K. M. van*, and *Radio Corp. of America*, introduction of active metal into electric-discharge devices, (P.), B., 911.
- Teves, *M. C.*, and *Radio Corp. of America*, photo-electric tube, (P.), B., 415, 1053.
- and *Veenemans, C. F.*, adsorption of alkali metals on metal surfaces. II. Dipole moment of adsorbed Cs ions; adsorption isotherm. III. Adsorption energy of the ions. IV. Adsorption of atoms next to ions. V. Influence of temperature on the normal photo-electric effect, A., 27, 929.
- See also *Geel, W. C. van*, and *Gessel, K. M. van*.
- Debré, *R.*, *Marie, J.*, *Cléret, F.*, and *Messimy, R.*, late rickets with chronic nephritis and glycosuria, A., 888.
- De Broglie, *L.*, expression for [energy] density in terms of the new theory of the photon, A., 143. Interaction between matter and the magnetic field, A., 427.
- and *Winter, J.*, photon spin, A., 9.
- De Broglie, *M.*, [artificial radioactivity], A., 559.
- De Brouckère, *L.*, and *Solowiejczyk, S.*, colorimetric determination of copper as cupric sulphide, A., 318.
- De Bruin, *G.*, prevention of "mouth flame" of ordnance, B., 879.
- De Bruyn, *C. A. L.*, apparatus for testing light-fastness, B., 1. Durability of paints, B., 160. [Dutch] paint specifications and tests, B., 365. Determination of calcium oxide in ochres, umbers, and terra di Sienna, B., 465. [Testing] gas-meter paints, B., 959. [Relative value of several methods of determining durability of varnishes], B., 960.
- See also *Maas, C. F. H.*
- De Bruyne, *J. M. A.*, and *Smyth, C. P.*, dipole moment of trideuterammonia, A., 1055.
- Debye, *P.*, magnetic method of producing low temperatures, A., 187. Rotational state of molecules in liquids, A., 430. Dielectric saturation and hindrance of free rotation in liquids, A., 567. Molecular rotation in liquids, A., 569. Relationships between chemical constitution and dielectric properties, A., 808.
- De Carli, *F.*, Sardinian kaolin, a national raw material, B., 850.
- De Carvalho, *A. P.*, a simple γ -pyran, 2:4:6-tetraphenyl- γ -pyran, A., 354. Phototropy; three new phototropic compounds, A., 497.
- De Castro-Galhardo, *A.* See *Chabanier, H.*
- De Cew, *J. A.*, free-rosin emulsions, (P.), B., 278. Adverse function of gases in manufacture of paper, B., 399. Waterproofing fibrous and other materials, (P.), B., 401. Special types of rosin size and their physical properties, B., 490.
- Dechant, *F. H.*, and *Industries of America, Inc.*, water-gas process, (P.), B., 537.
- De Châtel, *A.*, effect of trimethylenetetrazole on the heart, A., 1020.
- and *Motika, J.*, dangers of the therapeutic application of α -dinitrophenol, A., 655.
- Déchêne, *G.*, radiation from cells formed of semi-conductors, A., 147. Electrical resistances at the contact of two semi-conducting materials, A., 567. Influence of the passage of an electric current on phosphorescence of zinc sulphide, A., 1055.
- Decker, *H.*, and *Petsch, W.*, diacridyl and its derived radicals and luminescent salts, luzigenin salts, A., 1254.
- Decker, *L. B.*, treatment of wood [for pulp manufacture], (P.), B., 799.
- Decker, *P.* See *Taubenhaus, J. J.*
- Decker, *S. W.* See *Lloyd, J. W.*
- Deckert, *H.* See *Simon, Arthur.*
- Deckert, *W.*, colorimetric determination of zinc with dithizone, A., 719. Physiological arsenic and the use of the Kjeldahl flask in its detection, A., 948.
- De Clerck, *J.*, r_{H_2} and its applications in brewing, B., 40.
- See also *Tombeur, F.*
- De Clercq, *A.*, ratio between the calcium and phosphorus contents in *Merlangus vulgaris* and *Scyllium canalicula*, B., 604.
- Decorative Development, Inc. See *Pöschel, A. B.*
- De Coursey, *W.*, [flotation] apparatus for treating materials, (P.), B., 658.
- Decoux, *L.*, fertilisers and sugar beet, 1932, B., 646.
- and *Vanderwaeren, J.*, rational culture of sugar beet, B., 646.
- De Degiorgi, *A. C.*, 1:3:5-fluorodinitrobenzene, A., 1229. Effect on blood-sugar of some organic compounds with labile sulphur. III., A., 1413.
- Dèdek, *J.*, influence of maturity of beets on the purification effect, B., 1003. Invert sugar formation during evaporation, B., 1112.
- See also *Pázler, J.*
- De Demo. See *Cornubert, R.*
- Deditius, *L. F.* See *Swann, S., jun.*
- De Dominicis, *A.*, manuring of soils in dry climates. IV. Italy, B., 615.
- Dee, *P. L.*, experiments on artificial transmutation using the cloud-track method, A., 558.
- and *Gilbert, C. W.*, transmutation of heavy hydrogen investigated by the cloud-track method, A., 678.
- Deer, *W. A.*, cainsmore of Carsphairn igneous complex, A., 602.
- Dees, *M.* See *Ginnings, P. M.*
- Defandorf, *J. H.*, bioassay of digitalis. II. New leg-vein and intramuscular guinea-pig methods. III. Diuretic, oliguric cat method, A., 780, 1158.
- De Fayard, *J.* See *Dupont, G.*
- De Fazi, *R.*, new isomeride of cholesterol, A., 81. Stereoisomerism of indones, A., 85.

- De Fazio, *S. F.* See Seevers, *M. H.*
 De Ferrière, *J. F.* See Verdié, *H.*
 Dèffet, *L.*, piezometric researches. I. Influence of high pressures on the temperature of fusion and temperature of transformation of organic substances, A., 688.
 See also Timmermans, *J.*
 De Ficquelmont, *A. M.*, action of ammonia on the tetrameride of phosphorus dichloronitride, A., 592.
 Deflandre, *G.*, micro-diaclases in splinters of flint; their importance in artificial coloration of micro-fossils and in particular of foraminifera, A., 726.
 De Florez, *L.*, purification of hydrocarbon oil, (P.), B., 135. Fractionating tower, (P.), B., 883.
 See also Gray, *J. W.*, and Texas Co.
 De Forest, *A. V.*, and De Forest Associates, *A. V.*, magnetic testing [of steel, etc.], (P.), B., 906. Preparation of magnetic-testing material, (P.), B., 906.
 De Forest Associates, *A. V.* See De Forest, *A. V.*
 De France, *M. J.*, impregnation of textile materials, (P.), B., 801.
 De Fries, *H. A.*, and Ludlum Steel Co., alloy steel, (P.), B., 66. Improving workability of high-chrome steels, (P.), B., 66.
 Degan, *C.* See Gradinesco, *A.*
 Degard, *C.*, constitution and structure of alloys of silver and calcium, A., 1198.
 Piérard, *J.*, and Grinten, *W. van der*, diffraction of X-rays and electrons by carbon tetrachloride vapour, A., 1061.
 See also D'Or, *L.*
 Deghomont, *A.*, glucose colours, B., 568.
 Degea Akt.-Ges., (Auerger). See Stock, *A.*
 Degel, *G.* See Meunsen, *A.*
 Deger, *E.*, influence of climate on fat content of milk, B., 570.
 Deger, *H.*, possibility of using acid wort as nutrient medium for detection of yeasts and mould fungi in margarine, B., 68.
 Degering, *E. F.*, catalytic oxidation of carbohydrates and related compounds by oxygen in presence of iron pyrophosphates. XII. Ethyl alcohol, acetaldehyde, acetic acid, and sodium acetate, A., 309.
 See also McCleary, *R. F.*
 Degerth, *J. G.*, and Maskin-Och Brobyggnads Aktiebolaget, [centrifugal] bowl for clarifying liquids, (P.), B., 4.
 Degiorgi, *H.* See Zappi, *E. V.*
 Deglon, *C. R.* See Miller, *L.*
 De Graeve, *P.* See Fosse, *R.*
 De Groote, *M.*, Adams, *W. C.*, Farr, *K. R.*, and Tretolite Co., prevention of corrosion [in cooling systems of internal-combustion engines], (P.), B., 1098.
 Keiser, *B.*, Adams, *W. C.*, and Tretolite Co., [agents for] breaking petroleum emulsions, (P.), B., 837.
 Keiser, *B.*, and Tretolite Co., breaking of petroleum emulsions, (P.), B., 136.
 Keiser, *B.*, Wirtel, *A. F.*, and Tretolite Co., [agents for] breaking petroleum emulsions, (P.), B., 837.
 Roberts, *C. H. M.*, and Tretolite Co., breaking of petroleum emulsions, (P.), B., 838.
 and Tretolite Co., breaking of petroleum emulsions, (P.), B., 1127.
 De Groote, *P.*, porcelain-like bodies having great resistance to temperature changes, B., 803.
 Degtiarev, *M. M.* See Kuznetsov, *V. D.*
 Deguy, (*Mlle.*) *C.* See Guittonneau, *G.*
 De Haan, *A.* See De Jong, *H. G. B.*
 De Haas, *W. J.*, lowest temperature yet reached, A., 598.
 and Biermasz, *T.*, thermal conductivity of quartz at low temperatures, A., 1064.
 and Capel, *W. H.*, thermal resistance of bismuth single crystals at low temperatures, A., 20.
 and Casimir-Jonker, *J. M.*, penetration of a magnetic field into superconductive alloys, A., 287. Penetration of a magnetic field into superconductive alloys, A., 440.
 De Boer, *J.*, and Berg, *G. J. van den*, electrical resistance of gold, copper, and lead at low temperatures, A., 154. Electrical resistance of cadmium, thallium, and tin at low temperatures, A., 815.
 and Wiersma, *E. C.*, adiabatic cooling of magnetic substances, A., 465. Adiabatic demagnetisation of some paramagnetic salts, A., 689. Adiabatic demagnetisation of casium titanium alum, A., 815.
 De Haas-Lorentz, *G. L.* See Ehrenfest-Afanassjeva, *T.*
 De Hemptinne, *M.*, and Delfosse, *J. M.*, Raman spectra of heavy and light phosphine, A., 1445.
 and Savard, *J.*, ionisation potential of the nitrogen molecule, A., 1047.
 Dehennot, *O.*, curarising poisons and muscular fatigue, A., 245.
 Dehlinger, *U.*, character of metallic solid solutions and compounds, A., 158. Properties of alloys of Be, Mg, Zn, Cd, Hg, Al, and Sn, A., 291. Existence of a transformation of exactly the second order, A., 439. Hume-Rothery rule for intermetallic compounds, A., 688. Transition from metallic to heteropolar linking, A., 917. Magnetism and electronic state of metallic solid solutions and elements, A., 1309. Crystal structure and electron configuration of transition and univalent metals, A., 1451.
 De Hoffmann, *C.*, geometrical isomerides of heptenonitrile, A., 1357.
 De Holzer, *L. J.* See New York Belting & Packing Co.
 Deijs, *W. B.* See Kögl, *F.*
 Deines, *G.*, determination of *S* values in forest soils and humus. IV., B., 164. and Kürbis, *P.*, acidity values [in soil], B., 1108.
 Deines, *O. von*, and Grassmann, *H.*, processes in reaction between hydrogen sulphide and sulphurous acid in aqueous and alkaline solutions and their efficiency for purposes of preparation, A., 51.
 Deinse, *F. van*. See Berthelot, *A.*
 De Ipola, *R. V.*, saliva and gastric juice, A., 512.
 Deisenroth-Missovski, *M.*, Kurtshatov, *I. V.*, Latishev, *G. D.*, and Missovski, *L.*, neutron scattering in water and lead, A., 1296.
 Deiss, *E.* See Burchartz, *H.*
 Deitz, *V.*, linking energies of hydrocarbons, A., 284. Dynamics of molecular crystal lattices. I. Neon. II. Solid nitrogen, A., 686, 811.
 and Andrews, *D. H.*, dynamics of molecular crystal lattices. III. Models of vibrating crystals, A., 918.
 See also Andrews, *D. H.*, and Murray, *J. W.*
 De Izaguirre, *R.*, clarification of effluent from coal-washing plant, B., 339.
 De Jaegher, *M.*, and Bogaert, *A. van*, hyperglycemia due to electrical stimulation of the hypothalamus, A., 658.
 De Jahn, *F. W.*, chlorine and sodium nitrate from salt, B., 1141.
 and Janssen, *J. D.*, recovering in concentrated form [sulphur dioxide] gas existing in dilute admixture with other gases, (P.), B., 403.
 Déjardin, *G.*, and Schwégler, (*Mlle.*) *R.*, luminescence on agitating mercury in impure neon at low pressure, A., 147.
 De Jessey, *L.*, oxygen-cutting of nickel- and chromium-alloy steels, B., 594.
 De Jesus, *A. M.*, chemical analysis of volcanic rocks, A., 1215.
 Dejmek, *V.*, and Stern, *F.*, density determination of [sugar] juices during evaporation, using electrical conductivity measurements, B., 1112.
 De Jong, *H. G. B.*, measurement of viscosity of hydrophilic sols, A., 31. Oriented coacervates and their bearing on the formation of colloid-crystals, A., 701.
 and Bonner, *J.*, phosphatide auto-complex coacervates as ionic systems and their relation to the protoplasmic membrane, A., 1321.
 Dekker, *W. A. L.*, and Linde, *P. van der*, complex relations in lyophilic colloidal systems. VII. Complex and auto-complex sols, A., 297.
 and Linde, *P. van der*, coacervate sols and their relation to the theory of lyophilic colloidal stability, A., 701.
 Linde, *P. van der*, and De Haan, *A.*, complex relations in lyophilic colloidal systems. VIII. Essential and non-essential specific characteristics of the colloidal components of importance for complex relations, A., 297.
 and Stoop, *R.*, lyophilic colloids. XXIV. Specific influences of cations in the auto-complex flocculation of negatively-charged lyophilic colloids (gum arabic sol+neutral salt+alcohol), A., 821.
 and Teunissen, *P. H.*, microscopical determination of electrophoresis velocities and determination of critical concentration of hydrophilic colloids, A., 823.
 Verberg, *G.*, and Westerkamp, *R. F.*, clear phosphatide sols from commercial phosphatide preparations, A., 822. Hydrosols of an alcohol-insoluble plant phosphatide ("oil-free planticin"), A., 822.
 See also Holleman, *L. W. J.*, and Krayt, *H. R.*
 De Jong, *L. E. den Dooren*, immunology and its connecting links with chemistry, A., 1519.
 De Jong, *M.*, and Wielen, *P. van der*, [optical] dispersion of essential oils, B., 573.
 De Jong, *W. F.*, classification of silicates, A., 686.
 See also Billiet, *V.*
 De Jonge, *L.* See under Synd. "Joziidhoff."
 De Jongh, *S. E.*, lactation inhibition, A., 542. Site of action of menformone on the lactal gland, A., 542. Sex hormone and mucosa separation in the genital apparatus, A., 542.
 and Laquent, *E.*, regeneration of testes degenerated by menformone, spontaneously and by use of the gonadotropic hormone, A., 259.

- De Jongh, S. E., and Rosenthal, W., cholesterol content of adrenals of fatigued animals, A., 523.
See also David, K., and Dingemanse, B.
- Dekken, K. D., table for use in determination of reducing sugars by Luff's copper-test solution, B., 329. Bacteriological purity of sugars, B., 694.
- Dekker, W. A. L. See De Jong, H. G. B.
- De Kok, A. J. See Waterman, H. I.
- De Kok, W. J. C. See Waterman, H. I.
- De Kokas, E., and De Ludany, G., effect of introduction of hydrochloric acid into the duodenum on intestinal absorption of glucose, A., 892.
- De Kolosovski, N. A., thermodynamics of solutions; chemical constants of dissolved substances, A., 583. Free energy of solids at high temperature, A., 584.
[with Kulikov, F. S.], distribution of chloroacetic acids between water and halides of saturated hydrocarbons, A., 929.
- and Alimov, A., determination of the internal latent heat of vaporisation of azeotropic mixtures. III. Determination of the internal latent heat of vaporisation of liquids. IV, A., 817. Heat of vaporisation of acetone, and its saturated vapour pressure, A., 21.
- and Andriuschtschenko, S. A., distribution of triethylamine between water and aromatic hydrocarbons, A., 441.
- and Bekturov, A., distribution of benzoic acid between water and isobutyl alcohol, A., 441. Distribution of phenylacetic acid between two contiguous liquid phases, A., 929. Distribution of malonic and ethyldene-lactic acid between water and saturated monobasic aliphatic alcohols, A., 929.
- and Grishkun, E. V., determination of integral heats of solution. II, A., 584.
- and Kulikov, F. S., distribution of trichloroacetic acid between two contiguous liquid phases, A., 159. Partition of tartaric and citric acids between water and isomyl alcohol, A., 293. Distribution of monochloroacetic acid, and of dichloroacetic acid between two contiguous liquid phases, A., 441. Distribution of saturated monobasic aliphatic acids between water and *o*-nitrotoluene, A., 695.
- Kulikov, F. S., and Bekturov, A., distribution of saturated organic acids between two liquid phases, A., 577. Distribution of isovaleric acid, propionic acid, butyric and isobutyric acid between two contiguous liquid phases, A., 577. Distribution of saturated aliphatic monocarboxylic acids between two contiguous liquid phases, A., 1068.
- and Ponomareva, N. P., distribution of saturated fatty acids between water and toluene, A., 441*. Distribution of dimethylmalonic acid between two contiguous liquid phases, A., 441.
- and Théodorovitch, R. L., determination of the latent heat of vaporisation of azeotropic mixtures. V, A., 817.
- and Udovenko, V. V., specific heat of liquids. II, A., 574.
- De Kuthy, A., effect of colloids on crystallisation and formation of calculi, A., 580. Formation of gall-stones, A., 1006. Periodicity in the series of saturated fatty acids [solubility], A., 1068.
- Delaborde, H. See Morel, A.
- Delaby, R., and Sabetay, S., determination of free primary and secondary alcohols in essential oils in presence of tertiary alcohols by acetylation employing pyridine, B., 1118.
- De la Cierva, P., and Palacios, J., photometric measurements of X-ray reflexion. III. Atomic factors of sulphur and lead, A., 908.
- De Lacombe, M., plasticity of steels and their fracture at high temperatures, B., 549.
- De la Cueva, J. G. See Palacios, J.
- Delafont, A., effect of ultra-violet irradiation on certain yeasts, particularly *Schizosaccharomyces octosporus*, Beijerinck, A., 898.
- Delage, B., stability of lipin-protein complexes in blood-serum, A., 1261. Extraction of serum-lipins by cold ether-alcohol mixtures in health and disease, A., 1261.
- Delammatter, W. W. See Schowalter, H. E.
- De Lamprecht, R., production of a white luminous effect in tubes of electrified neon gas, (P.), B., 558.
- De Lander, A. M. See Eastman, N. J.
- Delaney Chemical Co. See Peterson, O. L.
- De Langen, L. H., and Spoelstra, H. J., sugar coolers, B., 1015. Tests on sugar dryers, B., 1015.
- De Langhe, J. E., theory of the ideal colour-sensitivity of photographic negative material. III, A., 458. Relation between exposure and blackening on exposure [of photographic emulsion] to X-rays, B., 783.
- Delaplane, G. F., tissue changes in poultry resulting from ingestion of sodium hydrogen carbonate, A., 1413.
- De Lapparent, J., boehmite and diaspore in Ayrshire fireclays (Scotland), A., 323. Stages in the metamorphism of Samos emeries, A., 1099. Position of montmorillonite among the phyllosilicates, A., 1345. An essential constituent of fuller's earth, A., 1346.
- De la Rivière, R. D., and Kossovitch, N., action of temperature and adsorption on the elements controlling the reactions of flocculation and deviation of the complement, A., 882. Nature of the agglutinogens of red corpuscles of different groups, A., 1263.
- Kossovitch, N., and Cygler, A., hæmolytic power of the sera of different blood groups, A., 1262.
- Kossovitch, N., and Try, H. T., effect of salts on the Wassermann reaction, A., 1403.
- De la Roche, M. B., use of brilliant-yellow and Poirrier-blue C₂B as indicators of pH, A., 947.
- De La Roza Corporation, pulping of fibrous and cellular materials, (P.), B., 624.
- Delarue, H. See Mingasson, G.
- De Laszlo, H., variation of the carbon-halogen link distances in different types of organic structure, A., 569.
- Delauney, S., and Gosset, J., post-operative variations of urinary sulphur, A., 648.
- and Jahiel, R., polypeptides in human saliva, A., 773.
- Delaunois, A. L., automatic temperature control of thermostats, ovens, etc. by means of an alternating-current valve relay, A., 187.
- De Laval Separator Co. See Ashworth, D. I., Dietrich, M. A., and Flowers, A. E.
- De Laverne, R. de B. See Turpain, A.
- De Laverne, V., and Kissel, P., hæmolysis by saponin and cholesterogenesis, studied *in vitro*, A., 881. Hæmolysis by solanine and cholesterogenesis, studied *in vitro*, A., 881. Hæmolysis by glucosides (saponin and solanine) and production of cholesterol *in vitro*, A., 1519. Rôle of cellular lysis (hæmolysis and leucolysis) in cholesterol content of pleural effusions, A., 1527.
- Delavigne, L., and Quartaroli, catalytic elements in relation to production and burning quality of tobacco, B., 969.
- Delaware Chemical Engineering Co. See Nagelvoort, A.
- Delaware, Lackawanna, & Western Coal Co. See Landon, N. R.
- Delbart, G. R., and Lecoeuvre, E., physical properties of austenitic low-carbon nickel-manganese cast iron, B., 358, 633.
- Delbet, P., agriculture, cows, and magnesium, A., 114.
and Franicevic, effect of magnesium halides on pH of urine, A., 107.
- Del Campo, A., and Sierra, F., determination of anions with benzidine; oxalates and selenates, A., 949.
- Del Carlo, E., and Paternosto, P. G., copper tetramminosulphate. II. Pharmaceutical data, B., 923.
See also Paternosto, P. G.
- Del Castillo, E. B. See Dassen, R.
- Delco-Light Co. See Dickey, E.
- Delcourt-Bernard, E., action of iodine in hypothyroidism, A., 889.
- Deleano, N. T., and Dick, J., variations in chlorophyll content of leaves, A., 1177.
- De Leenheer, L., mindigite, a new [copper] cobalt hydroxide, A., 190. Stannierite. I. and II, A., 725, 1478. Trielite, a new cobalt mineral, A., 1221.
- De Leeuw, F. J. G. See Hooft, F. V.
- Delektorskaja, N. M. See Magidson, O. J.
- De Leon, A. I., and Alfaro, B. A., Philippine chicle gum substitutes, B., 376.
- Délépine, M., formation of active racemates as a method of resolving racemates and a means of determining relative configurations, A., 65. Trichlorides of iridium^{III}-aquo-dipyridines, A., 946.
- Alquier, R., and Lange, (Mlle.) *Frédérique*, spontaneous resolution of pinene-nitrobenzylamine, A., 89.
- Labro, L., and Lange, (Mlle.) *Frédérique*, active racemates; fusion curve of mixtures of *d*- α -chloro- and - α -bromo-camphor- π -sulphonamide, A., 90.
- Délépine-Tard, (Mme.) M., iridium dipyrro-inobromo-compounds, A., 868. Bromo-salts of tervalent iridium, A., 1471.
- De Lestrangle, (Mme.) Y., bases prepared from pyrogallol ethers, A., 1504.
- Déletang, R., Desbordes, J., and Briskas, S. B., glutathionemia in children, A., 508.
- Delfosse, J. M., Raman spectrum of phosphine, A., 428. Calculation of vibration frequencies of C₂H₄ by the method of symmetrical co-ordinates, A., 1057.
- and Goovaerts, R., Raman spectrum of tribromosilane, A., 807.
See also De Hemptinne, M.

- Del Fresno, C., and Mairlot, E., potentiometric determinations in alkaline solution; determination of copper and silver, A., 720.
- and Moyano, J. F. F., action of chlorino on ferric oxide and other oxides, A., 453.
- Del Guerra, G., oxidation reactions connected with tryptophan, A., 499.
- Deliddo, C. See Mangini, A.
- De Liefde, W. C., tendency to explode of various forms of acetylene, B., 835.
- Delmarski, J. K., preparation of permuto by the dry method. I. and II., A., 714.
- Delkeskamp, C., retort bench for continuous distillation of fuel briquettes liable to be effected by pressure, (P.), B., 935.
- Dell, G. W., and Triumph Manufg. Co., mixing machine, (P.), B., 3.
- Dell'Acqua, G., nucleotides, nucleosides, and free purines of rabbit liver, A., 1266.
- Delmas, L. See Audibert, E.
- Delor, C. J. See Scott, E.
- Delorme, J., apparatus for determining fat in casein, B., 1161.
- See also Riou, P.
- Delot, M. H. V., and Pigal, R. A., smelting furnaces, (P.), B., 906.
- Delphant, J. See Mercier, F.
- Delrue, G., and Damme, J. van, chlorine content of gastric juice, A., 106.
- and Lacquet, A., acid secretion by the stomach. IV. Effect of alkalosis on secretion of acid in the dog; effect of the ionic environment in the blood, A., 1005.
- Delsasso, L. A. See Crane, H. R.
- "Delta" Technische-Verkehrs-Akt.-Ges., highly nitrogenous mashcs, (P.), B., 377.
- De Ludany, G., villikin content of different parts of the intestine, A., 258.
- See also De Kokas, E.
- Deluzenne, C., composition for manufacture of insulating and decorative linings, and plastic pastes for mouldings, agglomerates, and other articles, (P.), B., 769.
- Delvaux, P. See Baerts, F.
- Delwaule, (Mlle.) M. L., system bismuth iodide-potassium iodide-water, A., 36.
- System bismuth iodide-sodium iodide-water, A., 825.
- System bismuth iodide-ammonium iodide, A., 1077.
- Delwig, C. von. See Kalling, B. M. S.
- Dely, J. G., and Chem. Eng. Corp., gas purification, (P.), B., 440.
- See also Chem. Eng. Corp.
- Del Zoppo, R., carbohydrate exchange in splenectomised animals, A., 111.
- De Madariaga, P. See Catalan, M. A.
- De Mallemann, R., and Gabiano, P., magnetic rotatory power of ammoniacal nitrogen, A., 568.
- Demant, P., effect of hepatic denervation on stability of liver-glycogen, A., 243.
- Demaree, J. B., Fowler, E. D., and Crane, H. L., control of pecan rosette with zinc sulphate, B., 74.
- and Large, J. R., jun., injurious effects of Bordeaux mixture on pecan trees, B., 74.
- De Martini, F. E., slime growths in sewers, B., 80.
- Dember, A., determination of refractive index of aqueous solutions of electrolytes with free electric waves, A., 1201.
- De Meio, R. H., and Barron, E. S. G., effect of 2:4-dinitrophenol on cellular respiration, A., 395.
- De Meio, R. H., Kissin, M., and Barron, E. S. G., biological oxidations. IV. Catalytic effect of reversible dyes on cellular respiration, A., 121.
- See also Dill, D. B.
- Demenier, G. See Servantie, L.
- Dementieva, M. I. See Markovitch, M. B.
- Demesse, J. See Kling, A.
- Demina, V. I. See Fomin, S. V.
- Demina, E. N. See Ushakov, S. N.
- Deming, G. W. See Brewbaker, H. E.
- Deming, H. G., kinetic derivation of the mass action expression, A., 1082.
- Doming, J. H. See Jauncey, G. E. M.
- Deming, (Mrs.) L. S. See Deming, W. E.
- Deming, W. E., and Deming, (Mrs.) L. S., physical properties of compressed gases. V. Joule-Thomson coefficient for nitrogen, A., 1313.
- De Mingo, M. See Fernández, O., Täufel, K., and Thaler, H.
- Demjanov, N. J., cyclopropane derivatives, and their reactions, in particular those of isomerisation, A., 81.
- and Putochin, N. I., action of nitrous acid on tryptophan, A., 1132.
- Demjanova, N. M. See Mokruschin, S. G.
- Demjanovski, S., and Prokovieva, E., metabolism of silkworms. III. Reducing power of haemolymph of *Bombyx mori*, L., A., 391.
- Demme, H., microbiological decomposition of lignins and its importance in formation of soil-organic matter, B., 372.
- Demme, R. See Ott, E.
- Demmler, G. See Hüchel, W.
- Demole, F., and Ippen, F., anti-tyrotoxic action of ascorbic acid, A., 1423.
- Demolon, A., results of lysimeter experiments [on soils], B., 470.
- and Bastisse, E., dispersion of clay colloids; application to their extraction [in mechanical analyses of soils], B., 243.
- and Dunez, A., rôle of bacteriophage in lucerne-sick soils, B., 742.
- Demont, P. See Fellenberg, T. von.
- Demorest, D. J. See Sherman, R. A.
- Demougin, P., absorption of iodine vapour by active carbon and silica gel, A., 441.
- Phenomena of hygroscopicity, A., 1316.
- Effect of moisture and content of calcium carbonate on stability of gun cotton at 110°, B., 703.
- Comparison of contents of nitrogen and of soluble matter in batches of CP [powders] from Angoulême and from Moulin-Blanc, B., 831.
- Absorption from solutions by active carbon, B., 832.
- and Landon, M., oxidation of ether in presence of active carbon. I., A., 456.
- Dempster, A. J., new ion sources for mass spectroscopy, A., 677.
- Isotopic constitution of platinum and rhodium, A., 909.
- Isotopic constitution of uranium, A., 1048.
- Isotopic constitution of palladium and gold, A., 1048.
- Dempster, D. See Suhrmann, R.
- Dempster, Ltd., R. & J., and Scott, J. Wilson, apparatus for washing gases and bringing gases and liquids into intimate contact, (P.), B., 84.
- See also MacLaurin, R.
- Demtschenko, Z. See Plotnikov, V. A.
- Denard, F. See Morel, A.
- De Nayer, P. See Lacquet, A.
- Den Dooren de Jong. See under De Jong.
- Deneke, improvement of an obsolete benzol-recovery plant, B., 259.
- Denham, A. F., Bohn copper-lead bearing, B., 104.
- Cadmium-silver-copper bearing alloys developed by Fedral Mogul, B., 552.
- Denham, H. G., and King, W. E., ternary system stannous oxide-sulphur trioxide-water, A., 1323.
- Denham, W. S., and Dickinson, E., stains to distinguish fibroin and silk gum, B., 445.
- Hutton, E. A., and Lonsdale, T., measurement of electrical resistance of yarns and cloths; variation in resistance of silk with pH , B., 363.
- Den Hoed, D., and Spiers, C. W. F., X-ray photolysis of hydrogen peroxide, A., 1211.
- De Nie, A., composition of brewing liquor and its effect on hop-boiling, B., 1112.
- Denigès, G., determination of quinine hydrobromide by the cupro-hydrogen bromide reaction, A., 102.
- Determination of mercury applicable to mercury cyanide, A., 186.
- Application of the mercuric sulphate reagent, A., 186.
- Colorimetric micro-determination of caffeine, A., 360.
- Reaction of Weydel and its application to the colorimetric micro-determination of caffeine, A., 999.
- Rapid identification of constituents of official quinine hydrochloride, B., 78.
- Denisenko, J. I. See Zelinski, N. D.
- Denisoff, A. K., and Richardson, O. W., emission of electrons under the influence of chemical action. V. Theory of the chemical electron emission and its application to certain reactions involving halides. VI. Reactions of liquid NaK₂ with gaseous ClCN, HgBr₂, (OH)₂, O₃, and with some gases giving small negative emission, A., 557, 1293.
- Denison, G. H., neutron-like particles accompanying β -ray emission, A., 1441.
- Denison, I. A., and Ewing, S. P., corrosiveness of Ohio soils, B., 1156.
- Denisovich, B., absorption of iodine by charcoal, B., 802.
- De Nito, G. See Aurisicchio, G.
- Denizot, A. See Hrynakowski, K.
- Denk, G. See Scholder, R.
- Denney, C. E. See Wakelin, J. J.
- Dennig, H., and Schuelke, E., iodine treatment in Basedow's disease, A., 649.
- Denning, L. B. See Pierce, G. R.
- Denning, P. C., Schundler & Co., Inc., F. E., and Wyodak Chem. Co., washing composition [detergent], (P.), B., 194.
- Dennis, L. M. See Rochow, F. G.
- Dennis, W., and Air Reduction Co., Inc., separation of krypton and xenon from air and apparatus therefor, (P.), B., 227.
- Dennison, D. M. See Sutherland, G. B. B. M.
- Dennison, M. See Korenchevsky, V.
- Dennison Manufacturing Co. See Alden, G. R.
- Denny, F. E., testing plant tissue for emanations causing leaf epinasty, A., 1548.
- Thiourea prevents browning of plant tissues and juices, B., 647.
- and Miller, L. P., production of ethylene by plant-tissue as indicated by the epinastic response of leaves, A., 1179.
- Shortening the rest period of potato tubers, B., 868.
- Storage temperatures and chemical treatments for shortening the rest period of small corms and cormels of gladiolus, B., 1110.

- Denoël, *L.* See Dawans, *A.*
- Den Otter, *H.* See Alphen, *J. van*, and Kreulen, *D. J. W.*
- Densham, *A. B.*, and Smith, *F. C.*, protective coatings for underground pipes, *B.*, 1146.
- Denstedt, *O. F.* See Brocklesby, *H. N.*
- Dent, *C. E.* See Robertson, *J. M.*
- Dent, *F. J.*, Blackburn, *W. H.*, and Williams, *N. H.*, controlled operation of a carburetted water-gas plant. I. Factors influencing performance of the plant, *B.*, 6.
- Dentists' Supply Co. of New York. See Dietz, *C.*
- Denus, *A. P.*, tunnel kilns or ovens, (*P.*), *B.*, 454.
- Denver Equipment Co. See Logue, *L. H.*
- Deo, *S. G.* See Alimchandani, *R. L.*
- Deobald, *H. J.*, and Elvehjem, *C. A.*, effect of feeding high amounts of soluble iron and aluminium salts, *A.*, 1160.
- De Ong, *E. R.*, calcium carbonate as a weevil control, *B.*, 331. Oil-soluble copper as a fungicide, *B.*, 690.
- Department of Scientific & Industrial Research, [seventh annual] report of the Water Pollution Research Board, *B.*, 176. Report of test by the Director of Fuel Research on the plant of the British Coal Distillation Co., Ltd., at Newbold, Leicestershire, *B.*, 339.
- De Passillé, *A.*, thermochemistry of ammonium arsenates, *A.*, 936. Existence of a series of ammonium orthophosphates and orthoarsenates, *A.*, 1213.
- De Pauw, *P. F. M.*, determination of combustion temperature of smokeless powder, *B.*, 879.
- Depew, *H. A.*, influence of pigment on paint film weathering, *B.*, 860. and Easley, *M. K.*, surface-energy relationships between pigment materials and rubber, *B.*, 368.
- Depierre, *F.* See Bovet, *D.*
- Deplanque, *R.*, assessing principal and subsequent saccharification in the distillery, *B.*, 1160. See also Kilp, *W.*, and Lampe, *B.*
- De Pree, *L.* See Dow Chem. Co.
- De Rachat, *N. G.* See Universal Oil Products Co.
- De Rassenfosse, *A.*, purification of sugar juices, *B.*, 473.
- Derby, *I. H.*, Cunningham, *O. D.*, and Reilly, *P. C.*, ore-flotation reagent, (*P.*), *B.*, 106.
- Horner, *H. R.*, and Reilly, *P. C.*, carbonisation of solid carbonisable material, (*P.*), *B.*, 87. and Reilly, *P. C.*, graphitic carbon, (*P.*), *B.*, 936. Volatilisation of materials, (*P.*), *B.*, 1025.
- Derby, *R. L.*, corrosion from zero softened waters, *B.*, 608.
- Derbyshire, *S. F.* See Brit. Aluminium Co.
- Deren, *P.* See Fink, *C. G.*
- Derevjagin, *A. A.*, preparation of liquids for smoking meat, *B.*, 698.
- Derevjankin, *S.* See Jacyna, *V.*
- De Rewal, *F. J.*, and Atmospheric Nitrogen Corp., activation of catalysts [for ammonia synthesis], (*P.*), *B.*, 404.
- Derge, *G. J.* See Smith, *D. P.*
- Derhoe, *H. E. van*. See Eastman Kodak Co.
- Dérivière, *M.*, possible improvement of Walpole's comparator blocks, *A.*, 840. Application of antimony electrodes for p_H measurements in dyebaths, *B.*, 542. Slag from the manufacture of ferro-manganese, *B.*, 1144.
- De Rienzi, *A.* See Sirianni, *G.*
- Dering, *H. O.*, magnesium sulphate, (*P.*), *B.*, 355.
- Derjaguin, *B.*, and Volarovitsch, *M. P.*, determination of viscosity of molten glass and proof of H. Le Chatelier's formula. I. Falling-sphere method, *B.*, 61. See also Volarovitsch, *M. P.*
- Dermer, *O. C.*, and Fernelius, *W. C.*, action of titanium tetrachloride on organic nitrogen compounds, *A.*, 180.
- De Robles, *C. R.*, and Moles, *E.*, condition of substances dissociated in concentrated sulphuric acid, *A.*, 931.
- De Rochebouët, *F.* See Chaix, *M.*
- Derr, *R. B.* See Aluminum Co. of America.
- Derrick, *E. H.*, heat cramps and uræmic cramps with special reference to their treatment with sodium chloride, *A.*, 1401.
- Dersch, *F.* See Conant, *J. B.*
- De Ruyter, *T. H.*, histology of avitaminosis-*A.* I and II, *A.*, 1174.
- Dervenaga, *A.* See Livierato, *S.*
- Dervichian, *D. G.*, Eötvös constant, *A.*, 1058. Interpretation of the Eötvös constant and of its different values, *A.*, 1059. Interfacial tension between two liquids, *A.*, 1070.
- Dervillée, *P. M.*, and Castagnou, *R.*, blood-sugar variations in rabbits poisoned by ingestion of carbon tetrachloride, *A.*, 243.
- Desai, *B. G.* See Niyogi, *S. P.*
- Desai, *B. N.*, colloids in the atmosphere, *A.*, 295. See also Desai, *H. N.*
- Desai, *H. N.*, Naik, *D. B.*, and Desai, *B. N.*, viscosity of moderately and highly concentrated solutions of electrolytes in water and methyl, ethyl, and *n*-propyl alcohols; relation between conductance and fluidity, *A.*, 295.
- Desai, *P. G.*, and Patel, *A. M.*, effect of polarity on the solubilities of some organic acids, *A.*, 695.
- Desai, *R. D.*, spatial configuration of cyclohexane and its derivatives, *A.*, 333. and Hunter, *R. F.*, isomeric forms of complex acetic acid, *A.*, 618. Multiplanar cyclohexane rings, *A.*, 1495.
- Hunter, *R. F.*, and Koppal, *L. G.*, condensation of thiocarbamides with chloroacetic acid and conversion of arylformamidinethiolacetic acids into ψ -thiohydantoin derivatives, *A.*, 364. See also Ahmad, *B.*, and Bukhsh, *M. W.*
- Desai, *R. M.* See Dastur, *R. H.*
- De Saint-Mars, *J.* See Woog, *P.*
- Desalbres, *L.*, French pine oil, *B.*, 606.
- Desanti, *E.* See Malméjac, *J.*
- Desbordes, *J.* See Delétang, *R.*, and Eck, *M.*
- Desch, *C. H.*, structure of metallic coatings, films, and surfaces, *A.*, 1307. Testing of materials, *B.*, 257.
- Desehalit, *G. I.*, lowering sulphur content of coke by admixture of catalysts to the coal, *B.*, 292. Phosphorus content of the coal mixtures and cokes of the Don basin, *B.*, 978. Calculating the heating system of coke ovens, *B.*, 1079. Low-temperature carbonisation of Ukrainian brown coals with catalytic cracking in the gas phase of the distillation products to increase yields of the light benzene fractions, *B.*, 1123.
- Deschaux, *F.*, determination of stabilisers in products containing nitrocellulose, *B.*, 575.
- Descollouges Frères, odorous chemical compounds, (*P.*), *B.*, 749.
- Deseniss, *M.* See Schmidt, *Arthur.*
- Desgrez, *C.* See Lefèvre, *C.*
- Deshpande, *S. S.* See Bedekar, *D. N.*
- Deshpande, *P. Y.* See Paranjpe, *G. R.*
- De Sigmund, *A. A. J.*, and Iyengar, *M. A. S.*, determination of exchangeable bases and of the *S* value in soils containing both calcium carbonate and calcium sulphate, *B.*, 1059.
- De Silva, *B. L. T.*, distribution of "calcicolic" and "calcifuge" species in relation to content of the soil in calcium carbonate and exchangeable calcium, and to soil reaction, *B.*, 164.
- De Simo, *M.* See Shell Development Co.
- Désirant, *M.*, and Duchesne, *J.*, new emission spectrum of sulphur in the photographic infra-red, *A.*, 1437. See also Rosen, *B.*
- Deskowitz, *M. W.*, and Buchbinder, *L.*, species of *Salmonella* producing a water-soluble pigment, *A.*, 899.
- Deslandres, *H.*, relation between molecular spectrum and electrons and electron rings of the constituent atoms, *A.*, 281, 561, 911.
- Desmaroux, *J.*, influence of [length of] tempering on the coefficient of emission and the content of solvent of powder *B.*, 831. and Mathieu, *M.*, action of acetone on nitrocellulose, *B.*, 1039.
- Desnuelle, *P.* See Fromageot, *C.*
- D'Esopo, *L. M.* See Lavietes, *P. H.*
- De Souza, *D.*, and Hocking, *F. D. M.*, hypercoagulability of the blood due to intramuscular injection of sodium citrate, *A.*, 771.
- Desreux, *V.*, parachor, *A.*, 918.
- Dessaignes, *C.* See Morel, *A.*
- Desseigne, *G.*, condensation of isopropyl alcohol with toluene and its derivatives, *A.*, 612. Condensation of isopropyl alcohol with toluene and its nitro-derivatives, *A.*, 739. Separation of *m*-cresol and *p*-cresol, *B.*, 664. See also Vandoni, *R.*
- Destrée, *P.* See La Barre, *J.*
- De Stubner, *E. C.*, dispersion of pigments, (*P.*), *B.*, 161. Processing finely-divided solids [e.g., preparation of oil paints], (*P.*), *B.*, 1004.
- Desveaux, *R.* See Lemoigne, *M.*
- De Sweemer, *A.*, solubility isotherms for complex metal thiocyanates. IV. System $\text{Ca}(\text{SCN})_2\text{-Co}(\text{SCN})_2\text{-H}_2\text{O}$, *A.*, 26.
- Désy, *G. G.* See Koppers Co. of Delaware.
- De Toni, *G.*, organic phosphorus of the blood, studied through prolonged spontaneous hydrolysis in the human subject and in some domestic animals, both adult and infantile, *A.*, 642.
- De Traverse, *P.* See Rathery, *F.*
- Détrie, *J.* See Toussaint, *G.*, and Vincent, *H.*
- Detroit Paint & Varnish Production Club, drying qualities of soya-bean oil, *B.*, 31.
- Detroit Steel Products Co. See Gillett, *H.*
- Dettwyler, *W.* See Du Pont de Nemours & Co., *E. I.*
- De Turk, *E. E.*, adaptability of sewage sludge as a fertiliser, *B.*, 1071.
- Deubner, *A.*, experiments with two thin metallic layers pressed together, *A.*, 1191. and Dohenzig, *A.*, low-frequency conductivity of mixtures of aqueous solutions of electrolytes, *A.*, 449.

- Deuel, H. J., jun. See Butts, J. S.
- Deulofeu, V., bile acid of snake's bile, A., 378. Amino-acids. V. Modification of the reduction of benzamidoacrylic acids in the Erlennmeyer synthesis, A., 489. Bile acids of Argentine snakes, A., 1399.
- and Mendivelzua, G., amino-acids. VIII. Condensation of creatinine with aromatic aldehydes and syntheses of N-methylamino-acids, A., 850.
- and Repetto, O., amino-acids. VI. Preparation of 3-hydroxy-1-methoxy-phenylalanine, A., 489.
- See also Houssay, B. A.
- Deuticke, H. J. See Embden, G.
- Deutsch, A. See Hauser, K. W.
- Deutsch, B., determination of haemoglobin in blood, A., 102.
- Deutsch, G., [Steiner] viscosimeter and its various applications, B., 1.
- Deutsch, H. R. See Assoc. Appliances, Ltd.
- Deutsch, S. See Assoc. Appliances, Ltd.
- Deutsch, V. See Paic, M.
- Deutsch, Walter, respiration of red blood corpuscles of normal subjects and in various forms of anaemia, A., 235.
- and Schlapp, W., adrenaline content of the adrenal glands in scurvy and in inanition, A., 1403.
- Deutsch, Walther, and Internat. Precipitation Co., electrical precipitation [for gases], (P.), B., 415.
- Deutsche Edelstahlwerke Akt.-Ges., steel alloys [for valves for high-temperature work], (P.), B., 66. Treatment of metallic [steel] articles or the metallic surface layers or coatings of articles, (P.), B., 772.
- Deuts. Gesellschaft für Schädlingsbekämpfung m.b.H. See Gassner, L.
- Deuts. Gold- & Silber-Scheideanstalt vorm. Roessler, abrasive smoothing or polishing cloths, paper, etc., (P.), B., 150. Solid formaldehyde, (P.), B., 218. Cementation of iron, steel, and alloys thereof, (P.), B., 235, 503. Mouth-wash powders, (P.), B., 256. Chlorinated rubber, (P.), B., 463, 1105. Decolorisation of sugar juices, (P.), B., 871. [Germicidal] dressings, bandages, etc., (P.), B., 877. Decomposition of beryllium minerals, (P.), B., 1142.
- and Hess, L., hydrogen peroxide, (P.), B., 148.
- and Jaeger, G., electrolytic production of beryllium, (P.), B., 1148.
- See also Baier, H., Pohl, W., and Ryschkewitsch, E.
- Deuts. Hydrierwerke Akt.-Ges., substantive [azo]-dyes, (P.), B., 15. Dye pastes for copying papers, typewriter ribbons, duplicating stencils, etc., (P.), B., 15. Materials containing fatty substances soluble in strong alkaline baths, (P.), B., 237. Treatment of rubber and latex, (P.), B., 512. Dyeing of textiles, (P.), B., 589. Treatment of cellulose fibre to improve dyeing properties thereof, (P.), B., 589. Adhesives, (P.), B., 645. Prevention of foaming of liquids, (P.), B., 755. Bituminous paints, lacquers, and similar coating compositions, (P.), B., 775. Water-soluble mixed quinonazo-dyes, (P.), B., 797. Treatment [carbonisation] of raw wool, (P.), B., 846. [Plasticisers for] manufacture of lacquers, films, plastic masses, etc., (P.), B., 914.
- Deuts. Hydrierwerke Akt.-Ges., quaternary ammonium salts, (P.), B., 941. Water-soluble organic sulpho-compounds [textile assistants], (P.), B., 985. Treatment of dyeings, (P.), B., 1042. Lacquers, varnishes, films, filaments, plastic masses, etc., [from cellulose esters or ethers], (P.), B., 1056. Water-soluble mineral acid derivatives of alkylamines of high mol. wt., (P.), B., 1131.
- Deuts. Kunstseiden-Studienges. m.b.H., improvement of wool, (P.), B., 542.
- Deuts. Maizena Ges.m.b.H., starch-disintegration products capable of forming films, (P.), B., 649. Setting media for photographic emulsions, (P.), B., 702.
- Deuts. Stärke-Verkaufsgenossenschaft Eingetragene Genossenschaft m.b.H., preparation of a dry product from glucose syrup, (P.), B., 119.
- Deuts. Tornesit-Ges.m.b.H. See Schmidt, Arthur.
- Devadatta, S. C., distribution of lactate between the corpuscles and the plasma in blood, A., 880.
- De Vaney, F. D., Clemmer, J. B., and Reclamation Co., recovery of manganese from ore, (P.), B., 414.
- See also Coghill, W. H.
- De Vaney, G. M., Titus, H. W., and Nestler, R. B., vitamin-A content of eggs produced by chickens fed with viosterol and various percentages of cod-liver oil, B., 971.
- Devauux, H., effect of carbonic acid on spreading of ovalbumin on the surface of water, A., 161. Adsorption of ovalbumin at the free surface of its solutions when the concentration of the latter varies from 10^{-2} to 10^{-3} , A., 819. Insolubility of thin films of albumin, A., 1071. Albumin membranes: their rigidity, elasticity, and insolubility, A., 1071.
- and Cayrel, J., effect of temperature on electrical conductivity of a thin film of CuS , A., 12.
- Dévé, F., sterilisation of hydatid sand by formalised and by iodised solutions, A., 1031.
- De Vecchis, J., treatment of the residues from the roasting of iron pyrites to obtain a raw material [magnetic iron oxide] for metallurgy, (P.), B., 767.
- Devegney, F. E. C., new agent for stimulating metabolism: dinitro-*o*-cyclopentyl-phenol (preparation 2769/1) and its action on basal metabolic rate, A., 1412.
- Devekki, V. S., errors in calculating the quantity of coke-oven gas and its calorific value, B., 1080.
- Deventer, J. K. van, antifibrinolytic titre of commercial antistreptococcal sera, A., 1396.
- See also Madison, R. R.
- Devereux, W. C., aluminium alloys and improved methods of manufacture, B., 154.
- See also Armstrong-Siddeley Motors, Ltd.
- Devers, P. K. See Gen. Electric Co.
- Devèze, R., amino-aciduria and ammoniuria in acute uranium nephritis in the dog, rabbit, and rat, A., 247. Organic-aciduria in acute uranium nephritis in the dog, rabbit, and rat, A., 247.
- Deviller, C. See Ambar, L.
- Devine, J. See Channon, H. J.
- De Vito, G., proteases of *Ficus carica*, A., 1025.
- See also Parisi, E.
- Devjatnin, V. A., and Doroschenko, V. M., determination of vitamin-C, A., 1430.
- De Voogd, J. G., and Linden, A. van der, tinning of sheet metal for manufacture of gas meters, B., 593.
- De Vooy, G. J., gravity-concentration process and apparatus for wet concentration of coal, (P.), B., 86.
- De Vore, L. T., and Saylor, W. J., higher order reversals in the solarisation region, A., 47.
- See also Morgan, H. E.
- Devoto, G., significance of dielectric constants in aqueous solution, A., 294.
- De Vriend, J. A. See Liempt, J. A. M. van.
- De Vries, G. H., influence of degree of supersaturation and temperature on growth rate of sugar crystals, B., 743.
- De Vries, O., sp. gr. of rubber in latex, B., 512.
- and Hetttershij, C. W. G., phosphoric acid balance in colonial moor soils, B., 1010.
- and Visser, J. W. C., changes in the pH of soils by repeated manuring with nitrogen fertilisers, B., 73.
- De Vries, T., densities of adsorbed gases. I. Carbon dioxide on charcoal, A., 1457.
- De Waal, H. L. See Pfeiffer, P.
- Dewald, R. H. See Nieuwenburg, C. J.
- Dewey & Almy, Ltd., concrete and hydraulic cement, (P.), B., 852. Coloured concrete, (P.), B., 852.
- See also Neiley, S. B.
- De Whalley, H. C. S., refractometric determination of dissolved solids in sugar syrups containing invert sugar, B., 1064.
- De Willigen, A. H. A. See Verkade, P. E.
- De Witt, C. C., copper sulphide-water contact angles, A., 697.
- Makens, R. F., and Helz, A. W., surface relations of the xanthates, A., 819.
- De Wolf, J., and Straete, L. van de, malco- and fumaro-nitriles, A., 737.
- De Wolff, C. J., volume of precipitate in clarification of sugar solutions. II., B., 39.
- De Worms, C. G. M. See Roberts, K. C.
- Dewsbury, W. G., and Davies, A., treatment of improved materials [lubricating, fuel, and transformer oils, printing ink] containing collagen, (P.), B., 470. Compositions containing collagen products and applications thereof, (P.), B., 1009.
- Dexter, S. T., respiratory rate and enzyme activity as related to hardened condition of plants, A., 263. Salt concentration and reversibility of ice formation as related to hardness of winter wheat, A., 266. Growth, organic nitrogen fractions, and buffer capacity in relation to hardness of plants, A., 904. Salt concentration and reversibility of ice formation as related to the hardness of lucerne, A., 1288.
- Dey, A. N., and Linstead, R. P., supposed isolation of a second form of β -dimethylcyclohexanone; ring rearrangement during Clemmensen reduction, A., 1239.
- Dey, B. B., and Kantam, (Miss) P. L., cotarnine series. I. Action of phenylcarbamide and -thiocarbimide on cotarnine. II. Reactivity of the aldehyde group in cotarnine and benzoyl-cotarnines. III. Isomeric biscotarninoacetones. V. Condensation of cotarnine with aromatic nitroaldehydes, A., 366, 1388, 1513.
- and Lakshminarayanan, A. K., 3-amino- and 3-hydroxy- β -naphthapyrones, A., 354.

- Dey, B. B., and Pillay, P. P., *Toddalia aculeata* (Pers.). II. Toddalolactone, A., 626.
- Rao, R. H. R., and Seshadri, T. R., geometrical inversion of acids derived from coumarins, A., 211, 757.
- and Srinivasan, T. K., cotarnino series. IV. 5-Bromonarcotine, 5-bromocotarnine, 5-bromohydrocotarnine, and 5-bromonarcicene and their derivatives, A., 1513.
- Deyrup, A. J., kinetics of decomposition of ammonium amalgam, A., 173.
- Deželić, M., oxidation of aetioporphyrin, A., 1255.
- Dhar, J., relative intensities of Raman and Rayleigh lines in light scattering, A., 281.
- Dhar, N. R., constancy of the ratio of carbon to nitrogen in natural systems undergoing oxidation, and problem of protein synthesis, A., 549. Chemical aspects of biological oxidations, A., 777. Denitrification [of soils] in sunlight, B., 38. Constancy of the carbon: nitrogen ratio in the natural system undergoing oxidation; nitrogen accumulation of soils in dry climates, B., 819.
- and Bhargava, P. N., chemical reactivity and absorption of light, A., 144.
- Bhattacharya, A. K., and Mukerji, B. L., photochemical reaction between iodine and oxalate, A., 832.
- and Mitra, R. N., preparation and properties of highly concentrated sols. IV. Thorium hydroxide sol, A., 820.
- and Mukherji, S. K., photosynthesis of amino-acids, A., 178. Nitrogen fixation in soil, B., 918. Influence of temperature on the carbon: nitrogen ratio of soils, B., 1059.
- Mukherji, S. K., and Kar, P. K., nitrogen fixation in soils on application of molasses, B., 740.
- Tandon, S. P., and Mukherji, S. K., denitrification [of soil] in sunlight and its retardation, B., 602.
- Dhéré, G., fluorescence of phthiocol, the pigment of the human tubercle bacillus, A., 1028.
- and Raffy, A., fluorescence spectra of rubene (tetraphenylrubene) in benzene solution and in the solid state, A., 429. Infra-red radiation emitted by fluorescent leaves under the action of light, A., 671. Fluorescence spectra of phaeophorbides, A., 808. Spectrochemistry of algae, A., 1043. Fluorescence spectra of some hydrocarbons of the rubene family, A., 1052.
- D'Hotman de Villiers, O., production of semi-refined sugar on the plantation, B., 693.
- Diacono, H., reversibility of metalloprotein precipitations by action of sodium thiosulphate; serological behaviour of complexes from hemolytic and syphilitic sera, A., 231. Antitoxic power of some metal-protein complexes obtained from anti-diphtheria and anti-tetanus sera, A., 1003.
- Diakov, F. A. See Hykeš, O. V.
- Diakov, M. J., and Ivankin, V. K., hydrolysis products of wood as food for farm animals, B., 971.
- Diakova, M. K., and Lozovoi, A. V., hydrogenation of Cheliabinsk brown coal, B., 708.
- Diakova, M. K., Lozovoi, A. V., and Tschertkova, S. I., composition, properties, and methods of treatment of primary tars of Cheliabinsk brown coal. II, B., 835, 933.
- See also Lozovoi, A. V.
- Diamantschleiferei Voegeli & Wirz Akt.-Ges. See Voegli-Jaggi, P.
- Diamond, H. See Taylor, H. S.
- Diamond Alkali Co. See Elledge, H. G., and Windecker, C. N.
- Diamond Braiding Mills. See Berolzheimer, S. M.
- Diamond Power Specialty Corporation, apparatus for treating gaseous fluids with liquids, (P.), B., 211, 435.
- Dias, A. A., micro-determination of bromine in blood, A., 643.
- Dibbern, Sudholt, Mohr, W., and Oldenburg, F., distillery spent wash as a supplementary feed for milch cows, B., 379.
- Di Bella, G., vitamin-C and tubercular infection, A., 1270.
- Di Bella, L., importance of moisture in poisoning with carbon dioxide and with illuminating gas in mice, A., 1160.
- Dibold, H. See Lapp, P. W.
- Diealte Co. See Stockton, M.
- Dice, C. M. See Oldright, G. L.
- Dick, J. See Deleano, N. T.
- Dick, T. S. See Albion Sugar Co.
- Dickens, D. A., Cole, S. S., and Holmes, M. E., variations in the pyrometric cone equivalent of refractories after reheating at elevated temperatures, B., 546.
- Dickens, F., phenosafranin as an anti-catalyst of the Pasteur effect, A., 777.
- and Greville, G. D., metabolism of normal and tumour tissues. XIII. Neutral salt effects, A., 1013.
- Dickens, P. See Thanheiser, G.
- Dickenson, C. F. See Huelsonk, W. A.
- Dickenson, H. G. See Clemo, G. R.
- Dickey, E., and Delco-Light Co., carburettor process, (P.), B., 344.
- Dickey, J. B. See Gilman, H.
- Dickey, S. J., deacidification of gasoline, (P.), B., 180.
- Dickie, L. F. N. See Thompson, W. O.
- Dickie, W. A. See Brit. Celanese.
- Dickins, A. W. M. See Eastman Kodak Co.
- Dickinson, B. H., specific isotope effect in lead spectrum, A., 138.
- Dickinson, E. See Denham, W. S.
- Dickinson, E. A., and Gray Processes Corp., petroleum refining apparatus, (P.), B., 663.
- Dickinson, H. R. See Simpson, W. T.
- Dickinson, R. G. See Lyons, E. H., jun.
- Dickinson, S. See Astbury, W. T.
- Dickinson & Co., Ltd., J., Grant, J., Dorr-Oliver Co., Ltd., Stewart, R. F., and Evans, Philip, treatment of paper-mill wastes, (P.), B., 1072.
- Dickmann, A. See Bodnár, J.
- Dickmann, H., sewage or other wastewater treatment, (P.), B., 480.
- Dickson, J. P. See Stewart, C. P.
- Dickson, T. G. See Hall, A. H.
- Dickson, W. H. See Franks, W. R.
- Dickson, W. M. See Gen. Chem. Co.
- Diddle, A. W. See Allen, E., and Gardner, W. M.
- Di Delupis, S. D., plants and polar sorption of soils: physiological removal of sorbed calcium ions. I, B., 867.
- Didenko, P. D. See Adadurov, I. E.
- Didier-Werke Akt.-Ges., chamber ovens, (P.), B., 212. Coke ovens, (P.), B., 711.
- Diebold, W. See Klenk, E.
- Dieckmann, W. J., serum-colloid osmotic pressure in normal pregnancy, A., 1403.
- Diederichs, K. See Bamann, E.
- Diefenbach, W. T., receptivity of paper for ink in printing, B., 798.
- Dieke, G. H., internal resonance in carbon monoxide molecule, A., 9. Isotopic shifts in the spectra of diatomic molecules, A., 805. Class of perturbations of molecular levels, A., 917. Triplet $3p$ complex of the hydrogen molecule, A., 1437. $3p^2\Sigma \rightarrow 2s^2\Sigma$ bands of HD and D₂, A., 1437.
- and Blue, R. W., Fulcher bands of HH³ and H₂, A., 555.
- Diels, O., and Kech, H., syntheses in the hydroaromatic series. XXIV. Diene syntheses of nitrogenous hetero-rings. X. Adducts obtained from quinaldine and acetylenedicarboxylic esters, A., 1251.
- and Meyer, Reinhard, osazones. I. Anhydro-osazones, A., 1225.
- and Möller, Friedrich, syntheses in the hydroaromatic series. XXIII. Diene syntheses of hetero-rings containing nitrogen. IX. Stilbazole and acetylenedicarboxylic ester, A., 500.
- and Reese, J., syntheses in the hydroaromatic series. XXV. Adducts obtained from acetylenedicarboxylic esters and hydrazo-compounds. II, A., 1251.
- and Rickert, H. F., identity of the hydrocarbon, C₁₈H₁₆, obtained by dehydrogenation of sterols and genins with 3'-methylcyclopentenophenanthrene, A., 481. [Identity of 3'-methyl-1:2-cyclopentenophenanthrene with Diels' hydrocarbon, C₁₈H₁₆], A., 481.
- Diels, W. See Leuchs, H.
- Diemair, W., and Bleyer, B., plant-phosphatides and lecithin. III. Phosphatides of wheat germ, A., 421.
- Bleyer, B., and Arnold, F., detection of fruit wine in grape wine, B., 169. Luminescence phenomena in wine from partly-dried grapes; differentiation of partly-dried grapes and raisins, etc., in ultra-violet light, B., 376.
- Bleyer, B., and Schneider, L., detection and determination of gluconic acid, A., 732.
- Mayr, F., and Täufel, K., supposed decomposition of lecithin in egg products, B., 427.
- Dienbauer, J. See Paweck, H.
- Diener, F. P., Clemmer, J. B., and Cooke, S. R. B., beneficiating cement raw materials by agglomeration and tabling, B., 546.
- Diénert, F., bacterial clarification of water, B., 576.
- and Villemaine, F., photochemical reactions; action of phosphorous and hypophosphorous acids on uranyl salts, A., 177.
- Diepschlag, E., and Brennecke, E., behaviour of fluorspar in open-hearth slags, B., 498.
- Dierbach, R., disintegration of cocoa by means of lime, (P.), B., 1067.
- Dierichs, H. See Diltthey, W.
- Dierkes, G. See Mecheels, O.
- Diersche, M., incompleteness of the system of chemical elements, A., 1440.
- Dieryck, J. See Machebœuf, M. A.
- Dietel, F. G., melanophore hormone. IV. Isolation, A., 259.

- Dietel, F. G., and Ditsch, H., effect of posterior pituitary extract and thyroxine on water, sodium, and chlorine contents of tissues, A., 543.
- Dietel, H., reducing substances in the blood in clampsia, A., 1269.
- Dietlerle, R., rendering German rapeseed oil edible, B., 597.
- Dietlerle, W., light-filters from cyanine dyes, B., 1119.
- and Zeh, W., infra-red photography beyond 10,000 Å., B., 1119.
- Dietert, H. W., control of methods of preparing moulding sands and sand moulds, B., 26.
- Dietetic Laboratories, Inc., M. & R. See Otting, H. E.
- Dietrich, H. E., and Visking Corp., drying apparatus, (P.), B., 753.
- Dietrich, J. F., rotary-drum film evaporator, (P.), B., 658.
- Dietrich, K. R., and Grassmann, H., flash points and explosion limits of ethyl alcohol-trichloroethylene mixtures, A., 1206. Determination of the acid val. of motor spirit, B., 710.
- and Lohrengel, W., suitability of stabilisers for chlorinated hydrocarbons of low mol. wt., B., 137.
- Dietrich, L. E. See Duff, J. D.
- Dietrich, M. A., and De Laval Separator Co., refining of mineral oil, (P.), B., 294.
- Dietrich, W. See Danckwortt, P. W.
- Dietrichs, F. See Ehrenberg, P.
- Dietz, C., Whiteley, J. O., and Dentists' Supply Co. of New York, compound wire, (P.), B., 414.
- Dietz, C. F., and Commander-Larabee Corp., flour, (P.), B., 748.
- Dietz, E. M., chlorophyll and haemoglobin—two natural pyrrole pigments, A., 1177.
- Dietz, H. F., and Zeisert, E. E., barium silicofluoride (Dutox) in blister beetle control, B., 375. Performance of certain inorganic insecticide dusts in the control of cucumber beetles, B., 1012.
- Dietz, H. J. See Eastman Kodak Co.
- Dietz, T. J., volume increase of bacteria from X-ray irradiation, A., 1028.
- Dietzel, A., adjustment of enamels to sheet steel, B., 405.
- and Meures, K., reactions important for adherence when firing groundcoats containing no adherence-promoting oxides, B., 405. Expansion relations in sheet-iron enamel, B., 674.
- See also Geppert, R., Reis, K., and Wiegand, H.
- Dietzel, R., and Saxholm, K., standardisation of medicinal materials. III. Particle size and degree of dispersion, B., 523.
- Dietzler, A. J. See Dow Chem. Co.
- Dietzsch, F. See Wagner, W. G.
- Digby, W. P., King, F. A., and Kelvin, Bottomley & Baird, apparatus for comparing the rate of change of colour or loss of hiding or protective power of paints, varnishes, dyes, etc., (P.), B., 1004.
- Diggs, S. H. See Standard Oil Co.
- Di Gleria, J., structure and synthetic production of vitamin-C, A., 1429. Electrometric determination of vitamin-C (ascorbic acid), A., 1546.
- Dijatschkovski, S. I., and Livanskaja, V. A., colloid chemical hydrolysis of albumins. II., A., 445.
- Dijk, E. W. van, and Lameris, A. T., rotational analysis of the S₂ bands, A., 1183.
- See also Coster, D.
- Dijk, H. van. See Keesom, W. H.
- Dijk, J. A. van, determination of naphthalene in gas, B., 933. Determination of naphthalene in [coal] gas by means of picric acid, B., 933.
- See also Jaeger, F. M.
- Dijksma, A. J., prevention of gas explosions by powders, B., 835.
- Dikanova, A. See Lebedev, A. N.
- Dikshit, B. B., action of acetylcholine on the brain and its occurrence therein, A., 115.
- Dikumar, I. G., physiological significance of ammonium salts in relation to composition changes of nutrient solutions, A., 1178.
- Dill, D. B., and Edwards, H. T., properties of reptilian blood. IV. The alligator (*Alligator mississippiensis*, Daudin), A., 1392.
- Edwards, H. T., Bock, A. V., and Talbot, J. H., properties of reptilian blood. III. The chuckwalla (*Sauromalus obesus*, Baird), A., 999.
- Edwards, H. T., and De Meio, R. H., effects of adrenaline injection in moderate work, A., 1172.
- Edwards, H. T., and Forbes, W. H., tobacco smoking in relation to blood-sugar, blood-lactic acid, and metabolism, A., 118.
- Edwards, H. T., and Mead, S., blood-sugar regulation in exercise, A., 1142.
- See also Christensen, E. H., and Edwards, H. T.
- Dille, J. M., barbiturates. IX. Effect on the embryo and on pregnancy, A., 118.
- and Koppanyi, T., barbiturates. III. Chemical assay of barbiturates, B., 173.
- See also Koppanyi, T.
- Dillinger, C. E. See Hart, H. H.
- Dillinger, J. F. See Bozorth, R. M.
- Dillingham, F. T., and Thompson, R. R., changes in composition of Kona coffee berries at various stages of development; coffee oil, B., 379.
- Dillon, G., hard metal [carbide] alloys, (P.), B., 235.
- Dillon, J. H., and Johnston, N., measurement of plasticity of rubber, B., 113.
- Dillon, T., and O'Tuama, T., cellulose of marine algae, A., 550.
- See also Barry, V.
- Dillon, T. W. T., and O'Donnell, R., excretion of glucose by the rabbit kidney, A., 1268.
- Dills, L. E., and Menusan, H., jun., fatty acids and their soaps as contact insecticides, B., 647.
- Dilthey, W., and Blankenburg, C., heteropolarity. XXVI. Coupling processes, A., 483.
- and Dierichs, H., arylated pyridines. IX., A., 1505.
- Horst, I. ter, and Schommer, W., heteropolarity. XXVII. Deep-coloured aromatic five-ring ketones, A., 1241.
- and Hurtig, G., highly-arylated aromatic compounds. IV. Tetraphenylbenzenes, A., 204.
- and Quint, F., pyrenium compounds. XXIV. 2:3-Benzoxanthone and 9-phenyl-2:3-benzoxanthanol, A., 220.
- and Scheidt, P., positively activated hydrogen atoms. VIII. Saponification of benzil, A., 494.
- Dilthey, W., Schommer, W., Höschen, W., and Dierichs, H., highly arylated aromatic compounds. V., A., 967.
- Thewalt, I., and Trösken, O., highly arylated aromatic compounds. III. Highly phenylated benzenecarboxylic acids and products of their transformation, A., 213.
- Trösken, O., Plum, K., and Schommer, W., heteropolarity. XXIV. Colour and halochromism of deeply coloured aromatic five-ring ketones, A., 216.
- and Wizinger, R., heteropolarity. XXV. Constitution and colour, A., 973.
- See also I. G. Farbenind.
- Dima, L. See Spacu, G.
- Dima, M. See Otin, C.
- Di Maccio, G., Hagedorn-Jensen micro-method for determining blood-sugar, A., 509. Blood-sugar in "heat-stroke," under the influence of insulin, A., 538.
- Dimarskaja, L. V. See Karpuchin, P. P.
- Dimbleby, V. See Turner, W. E. S.
- Dimitriu, M. See Casimir, E. E.
- Dimov, A. M., and Volodina, O. A., determination of titanium in cast iron, iron, and steel, B., 410.
- Dimov, P. T. See Schujkin, N. I.
- Dimroth, K., lumisterol, A., 617.
- Dinelli, D. See Treibs, A.
- Diner, I. S., and Nemtsov, M. S., carboids formed in catalytic hydrogenation, B., 6. Destructive hydrogenation [of fuel oil] in presence of catalysts. I. and II., B., 54.
- Dingemans, E., and De Jongh, S. E., does follicle-juice contain, besides menformone, a substance influencing metabolism? A., 542.
- Freud, J., and Laqueur, E., differences between male hormone extracts from urine and from testes, A., 414.
- See also David, K.
- Dingle, H., modern spectroscopy, A., 279. Spectrum analysis, A., 1471.
- Dings, L. M. See Buss, O. F.
- Dingwall, A. See Price, D.
- Dinich, K., manufacture of baker's yeast from brewer's yeast, (P.), B., 1017.
- Dinjaski, K. See Wessely, F.
- Dinley, C. F., and Bell, J. H., apparatus for treatment with solvents, (P.), B., 1076.
- Dintzes, A. I., analysis of hydrocarbon gases, B., 54.
- Dippel, A. L. See Eastman, N. J.
- Dippel, C. J. See De Boer, J. H.
- Dippy, J. F. J., and Watson, H. B., influence of substituents on dissociation constants of carboxylic acids, A., 1076.
- Watson, H. B., and Williams, F. R., chemical constitution and dissociation constants of monocarboxylic acids, IV., A., 581.
- and Williams, F. R., chemical constitution and dissociation constants of monocarboxylic acids. II., A., 165. Mobilities of organic anions, A., 825.
- Williams, F. R., and Lewis, R. H., chemical constitution and dissociation constants of monocarboxylic acids. III., A., 581.
- See also Hinkel, L. E.
- Dirac, P. A. M., infinite distribution of electrons in theory of the positron, A., 278.
- Directie van de Staatsmijnen in Limburg, ammonium sulphate, (P.), B., 306.

- Dirscherl, W., sex hormones and related substances. III. Constitution of cincholin; its transformation into 3-hydroxyxatolocholan-17-one, A., 1242.
- and Hanuseh, F., sex hormones and related substances. IV. Dehydrogenation of equilin to equilenin, A., 1426.
- and Thron, H., quinoidine; occurrence of epiquinine and epiquinidine in cinchona bark, A., 1513.
- See also Thron, H.
- Dische, Z., significance of phosphoric esters in blood-glycolysis. I. Degradation of hexose phosphates to triose phosphates as the first stage; formation of fructose phosphate from glucose and glyceraldehyde by intact erythrocytes. II. Degradation of hexose monophosphate in haemolysed blood, A., 104, 1518. Relation between synthesis of adenosinetriphosphoric acid and oxido-reductive transformation of dihydroxyacetonephosphoric ester during glycolysis, A., 122. Relation between re-synthesis of adenosinetriphosphoric acid and reaction of pyruvic acid and dihydroxyacetonephosphoric esters, A., 250.
- and Rand, C., difference between disappearance of sugar and formation of lactic acid in blood-glycolysis, A., 509.
- and Robins, S. S., formation of methylglyoxal from trioses at neutral p_H and body temperature under the influence of phosphate and arsenate, A., 67.
- and Sachs, K., decrease of glycolysis and increase of readily hydrolysable acid-soluble phosphorus in blood after prolonged fatiguing work, A., 239.
- Dishoeck, H. A. E. van. See Benjamins, C. E.
- Dispersion Cathodique (Disca) Société Anonyme. See Alexander, P.
- Dispersions Process, Inc. See Shepard, M. G.
- Distel, W. R. See Alderks, O. H.
- Distillation à Basse Temperature & Auto-Agglomération des Combustibles, Absalom, W. J., Bruyant, G. V., and Kainscop, D., agglomerating fine material or dust from solid combustibles and means for applying such method, (P.), B., 8.
- Distillers Co., Ltd., Auden, H. A., and Staudinger, H. P., non-inflammable substitute for celluloid, (P.), B., 1137.
- Auden, H. A., Staudinger, H. P., and Eaglesfield, P., treatment [modification of solubility] of cellulose triacetate, (P.), B., 987. Cellulose ester compositions particularly for moulding purposes, (P.), B., 1057.
- Joshua, W. P., and Stanley, H. M., separation and recovery of olefines from [hydrocarbon] gases containing the same, (P.), B., 617.
- Joshua, W. P., Stanley, H. M., and Dymock, J. B., catalytic hydration of olefines, (P.), B., 262.
- and Lockey, J., aëration of liquids or dispersion of gases or vapours in liquids, (P.), B., 834.
- Ditchburn, R. W., and Braddick, H. J. J., absorption of light in gases, A., 137.
- and Harding, J., properties of crystalline magnesium oxide, A., 1060.
- See also Braddick, H. J. J.
- Ditmars, J. R. See Boyce, C. M.
- Ditsch, H. See Dietel, F. G.
- Ditt, F. See Klenk, E.
- Dittler, E., and Dworzak, R., carbonated spring water from Burgenland, A., 841.
- Dittmann, T., and Heinecke Co., Inc., multicolour prints and printing plates therefor, (P.), B., 925.
- Dittmar, C., distribution of growth-promoting factor (bios) in normal animal tissues and tumours, A., 1165.
- Dittmar, J. H., hygroscopicity of sugars and sugar mixtures, B., 603.
- Dittmar, P. See Becker, F., and Haid, A.
- Dittmer, J. See Seidel, F.
- Ditto, M. W., and Gas Fuel Corp., gas-making with emulsified fuel, (P.), B., 583.
- Dittrich, E., carbon black, B., 534.
- and Vollbrecht, H., laboratory apparatus for hydrogenating heavy tars, B., 178.
- See also Vollbrecht, H.
- Dittrich-Bach. See Steher.
- Ditz, H., and Ullrich, F., yellow coloration of hydrochloric acid containing selenium, A., 181.
- See also Ullrich, F.
- Diubakova, L. S. See Tschernoshukov, N. I.
- Divinski, A., and Rodzevich, V., lecithin and cholesterol from egg yolk, B., 825.
- Dix, A. S., Rogoff, J. M., and Barnes, B. O., diuresis of hyperthyroidism, A., 1032.
- Dix, E. H., jun. See Aluminum Co. of America.
- Dix, W., pot trials with calcium cyanamide, B., 687.
- Dixit, V. M., and Gokhale, G. N., condensation of phenols and phenolic ethers with acetonedicarboxylic acid; syntheses of β -substituted glutaric acids; anhydrides of β -2-hydroxyphenylglutamic acids, A., 353.
- Dixon, A. J. See Cutler, D. W.
- Dixon, B. E., determination of carbon in rocks and minerals, A., 53. Rhodium hydroxopentammines, A., 946.
- Dixon, E. S. See Texas Co.
- Dixon, H. E. See Harrell, C.
- Dixon, J. K., and Vance, J. E., reaction between nitrous oxide and hydrogen on platinum, A., 829.
- Dixon, K. C., oxidative disappearance of lactic acid from brain and the Pasteur reaction, A., 653.
- and Holmes, E., mechanism of the Pasteur effect, A., 1013.
- See also Ashford, C. A.
- Dixon, L. F. See Darkis, F. R., and Gross, P. M.
- Dixon, M., peroxidase specificity, A., 248.
- and Lemberg, R., xanthine-oxidase. XII. Oxidation of nucleosides, A., 248.
- Dixon, T. F., bromine in tissues, A., 234.
- Dixon, T. J., safety precautions in chemical manufacture, B., 833.
- Dixon Co., H. L. See Forter, S. A.
- Djelatides, D. See Javillier, M.
- Dlongatch, L., dendrites, single metal crystals, crystal grains, and mechanism of grain growth, A., 811.
- Dmitrenko, M. See Ferdmann, D.
- Dmitrieva, E. G. See Salkind, J. S.
- Dmitrieva, M. V. See Lapin, N. P.
- Dmochowski, A., and Assenhajm, D., urine- and blood-phosphatase, A., 1164.
- Zajdenman, A., and Rabanowska, A., iodometric determination of muscleguanine, A., 1266.
- Dmochowski, J., quantity of oil in linseed and hemp seed during different periods of maturation and germination as well as in birch and lime trees during different phases of winter, A., 269.
- Doak, G. O., arsenamides; compounds containing the As-N linking, A., 1139.
- Doan, D. J. See Cooke, S. R. B.
- Doan, F. J. See Welch, R. C.
- Doan, G. E., [iron] welding electrode, (P.), B., 1053.
- Doan, J. D. See Gottschalk, V. H.
- Dobbelstein, O. See Wieland, H.
- Dobbins, J. T., and Addleston, J. A., system $\text{Na}_2\text{SO}_4\text{-Al}_2(\text{SO}_4)_3\text{-H}_2\text{O}$, A., 935.
- and Sanders, J. P., volumetric determination of cobalt and nickel, A., 56.
- Dobenzig, A. See Deubner, A.
- Dobinski, S., influence of an electric field on the viscosity of liquids, A., 926.
- Dobitschin, D., and Frost, A. V., ageing of thin layers of catalysts, A., 940.
- Dobkevitch, H. See Aitoff, M.
- Doble, S. M. See Askey, P. J.
- Doborzynski, D. W. See Keesom, W. H.
- Doboz, E. von. See Sivó, R.
- Dobresco, J., manuring of soils in dry climates. VII. Rumania, B., 515.
- Dobrianski, A. F., and Zelenin, N. I., cracking with aluminium chloride, B., 54.
- Dobromilskaja, J. M. See Klebanksi, A. L.
- Dobrosecky, I. D., fluorine compounds as insecticides, B., 968.
- Dobrotn, N. A., distribution-in-angle of protons projected by neutrons, A., 1296.
- Frank, I., and Tscherenkov, P., observations of night sky luminescence by the extinction method, A., 556.
- Dobrovidov, A. N., and Shubin, N., nitrogen-hardened cast iron, B., 310.
- Dobrowolski, R. See Biluchowski, Z. Z.
- Dobrunov, L., relation of plants to nitrogen concentration in the nutrient solution, B., 38. Compatibility of hemp, flax, and oats in mixed cropping on soils of varying fertility, B., 166.
- Dobry, A. See Comp. de Prod. Chim. & Electrometall. Alais, Fröges & Camargue.
- Dobry, (Alme.) A., viscosity of solutions of cellulose nitrate, A., 291. Osmotic pressure of cellulose nitrate solutions, A., 445. Apparatus for determining very small osmotic pressures in colloidal solutions, A., 466.
- Dobson, G. M. B. See Meetham, A. R.
- Dock, W. See Mermod, C.
- Docksey, P., and May, C. J., relative efficiencies of packed fractionating columns, B., 577.
- Doquier, P. See Wylys, H.
- Dod, K. See Kirk, P. L.
- Dodd, B. C., naphtha versus gasoline refining and its effect on the finished product, B., 581.
- Dodd, D. R., and Pohlman, G. G., factors affecting the influence of soya beans, oats, and other crops on the succeeding crop, B., 1110.
- Dodd, E. N. See Britton, H. T. S.
- Dodd, F. R., and Loudon, C. R., effect of grinding in a power mill on albuminoid [protein] content of feeding-stuffs, B., 633.
- Dodd, H. See Imperial Chem. Industries.
- Dodd, K. See Minot, A. S.

- Dodds, E. C., Hills, G. M., Noble, R. L., and Williams, P. C., posterior lobe of the pituitary gland: its relationship to the stomach and to the blood picture, A., 902.
- and Noble, R. L., relation of the posterior lobe of the pituitary gland to anaemia and to blood formation, A., 902.
- See also Allan, H., and Cook, James W. *Wilfred*.
- Dodé, M., decomposition products of ammonium perchlorate, A., 313.
- and Basset, J., direct oxidation of iodine, iodides, and chlorates at ultra-presures, A., 461.
- See also Basset, J., and Matignon, C.
- Dodge, B. F. See Molstad, M. C., and Newton, R. H.
- Dodge, L. L., and Rhineland Paper Co., laminated paper, (P.), B., 1139.
- Dodge, W. G., and Tarvin, C. E., testing of newsprint for smoothness, ink penetration, and opacity, B., 400.
- Dodge, W. M. See Mitchell, H. S.
- Dodonov, J., and Medox, H., mechanism of preparation of tribenzylarsine according to Michaelis and Pictov, A., 1138.
- Doebbeling, S. E. See Caldwell, M. L.
- Doehleemann, E., and Fromherz, H., optical absorption and association of cadmium, zinc, and copper halides in aqueous solution, A., 444.
- and Langa, E., water as a weak electrolyte in the heats of dilution of strong electrolytes, A., 37. Heats of dilution and heats of vaporisation of D_2O-H_2O mixtures, A., 935.
- Doelger, W. P., and Prescott, S. C., citric acid fermentation, A., 124.
- Doelling, G. L., and Wagner Electric Corp., [hydraulic brake] fluid compositions, (P.), B., 338.
- See also Bebie, J.
- Dönges, [nitrocellulose] spraying lacquers for railway-carriage finishing, B., 465.
- Döpel, R., atomic disintegration of light elements by H and He, A., 7.
- Döpfer, H., and Wiester, H. I., influence of alloy elements on transformation of austenite and tensile properties of alloy steels in stepped heat treatment, B., 854.
- Doerell, E. G., statistical treatment and evaluation of agricultural data and results by means of a "loose-leaf" system, B., 919.
- Döring, H., crystallisation fluorescence, A., 147, 282. Intake of fluorescent substances by living plant cells, A., 1043. Blood-iodine values, A., 1518.
- See also Nitschke, A.
- Döring, T., and Geiler, J., production of pure, finely-divided vanadium, A., 181.
- Doerner, H. A. See Maier, C. G.
- Doetsch, H., relationship of thyroid gland and liver, A., 1285.
- Doetsch, J., permeability of the atmosphere and of glasses to ultra-violet radiation, A., 561.
- See also Piña do Rubies, S.
- Dötl, K. See Laquer, F.
- Dœuvre, J., constitution of the rhodinol from rose oil, A., 1107.
- and Perret, H., reduction of pulegone: pulegol, A., 624.
- Dogadkin, B., and Margolina, J., effect of surface-active materials and electrolytes on crystallisation of sulphur from rubber solutions, B., 196.
- Dogerloh, E. See Schwinning, W.
- Dogliotti, G. C., and Taglioni, V., permeability of capillaries in man, studied by concentration curve of glucose injected into the humoral artery and recovered from the vena mediana, A., 530.
- Doherty, H. L. See Doherty Research Co., and Loebell, H. O.
- Doherty Research Co., and Brandt, D. G., treatment [cracking] of [petroleum] oils, (P.), B., 892.
- and Burke, S. P., partial oxidation of hydrocarbons, etc., (P.), B., 983.
- and Doherty, H. L., distillation of [hydrocarbon] oils, (P.), B., 893.
- and Engelke, E. F., refining of pressure distillates, (P.), B., 1083.
- and Workman, A. R., conversion of petroleum oils, (P.), B., 663.
- Dohmen, H. J., pancreas and diastase, A., 1278.
- Dohogne, A., and Rezabek, G., oxidation of cod-liver oil by acidified sodium dichromate solutions, B., 365.
- Dohse, H. See I. G. Farbenind.
- Doimi, S. See Tommasi, G.
- Doisy, E. A., and St. Louis Univ., [ovarian] hormones, (P.), B., 525.
- Thayer, S. A., Veler, C. D., and St. Louis Univ., [ovarian] hormones, (P.), B., 525.
- See also Katzman, P. A., and Wade, N. J.
- Dolak, F. See Pázler, J.
- Dolbey, N. L. See Roberts, Ltd., J. W.
- Dole, M., glass electrode. III. Statistical explanation of the alkaline solution behaviour, A., 170.
- and Wiener, B. Z., density of water in relation to its thermal history, A., 437.
- Dolecek, R. L., β -decay theory, A., 1048.
- Dolejšek, V., and Eylmar, H., fine structure of the L_{III} absorption discontinuity of the rare earths, A., 1439.
- and Marek, J., L -absorption constants of protoactinium (91), A., 1440.
- See also Bouchal, F.
- Dolf, C., metabolic effect of cystine, A., 113.
- Dolgopolski, I. M. See Klebanski, A. L.
- Dolgov, B. N., Bolotov, B. A., and Popova, A. N., purification and conversion of the gas obtained by electro-distillation of phosphorus. III., B., 21.
- Karpov, A. Z., and Veltistova, M. V., pressure synthesis of methyl alcohol from water-gas. VII., B., 91.
- See also Veltistova, M. V.
- Dolgov, K. A., utilisation of maize leaves and stalks for paper manufacture, B., 942.
- Dolinek, A., importance of controlling the affining qualities of raw [beet] sugars, B., 329.
- Doliński, J., laboratory apparatus for conducting pyrogenesis, A., 187.
- Dolique, R., solubility of sodium thiosulphate in ethyl alcohol-water mixtures [at 20°], A., 292. Catalytic decomposition of formic acid in presence of selenic acid, A., 1084. Errors in colorimetric determinations, A., 1475. Bismuth iodide compounds of anti-pyrine, pyrimidone, and hexamethylene-tetramine, B., 123.
- Doll, J. H. See Jacquemain, R. P.
- Dols, M. J. L., supposed identity of artificial antirachitic vitamin (irradiated ergosterol) and the natural vitamin-D of cod-liver oil, A., 1430.
- Domagk, G., chemotherapy of bacterial infections, A., 1542.
- Domange, L., action of water vapour on copper fluoride, A., 448. Action of water vapour on metallic fluorides, A., 1088.
- Domaniewska-Krüger, M., resonance series of lead vapour, A., 3.
- Domański, T., and Suszko, J., third hydroxy-base derived from quinidine, A., 874. Third oxide base derived from quinidine, A., 1137.
- Domarev, V. S., comparison between the methods of pan-washing and chemical analysis for gold determination, B., 500.
- Domenici, F., adrenalinuria (Viale reaction) in physiological conditions, A., 539. Specificity of the Viale reaction for detecting adrenaline in the urine, A., 1173.
- Domenici, G., and Olivera, G., water retention and vitamin-A, A., 1174.
- Dominguez, R., renal excretion of creatinine. II. Volume of distribution. III. Utilisation constant, A., 513.
- Dominik, W., electrothermal production of nitric oxide in the light of researches on dissociation, A., 176. Deuterium oxide, A., 717.
- and Bartkiewiczówna, J., preparation and determination of ethylene oxide, A., 194.
- Dominikiewicz, M., determination of aluminium in aqueous aluminium acetate, A., 186. Reactions of natural natrolites, A., 601. Structure of hexamethylenetetramine, A., 762. Trimethyltriallyltri-amine and its mercury derivatives, A., 768.
- and Kijewska, M., determination of lead in solutions of basic lead acetate, A., 597.
- Domnitsch, K. M., and Dubrovski, A. M., factors influencing structure and anti-corrosive properties of phosphate coatings [on metal surfaces], B., 809.
- Domon, E. C. See Nat. Standard Co.
- Don, J., and Harrison, J., mutual interaction of liquid films, A., 1317.
- Donahue, J. K., and Parkins, W. M., lipin and haemorrhagic changes in adrenal cortex following traumatic shock, A., 1403.
- Donal, J. S., jun., Gamble, C. J., and Shaw, R., cardiac output in man; adaptation of the katharometer for the rapid determination of ethyl iodide in estimations of cardiac output by the ethyl iodide method; effect of posture on cardiac output and other circulatory and respiratory measurements, A., 371.
- Donald, C., and Reade, T. H., action of nitrous acid on tertiary amines: influence of acidity, A., 337.
- Donald, H. P., sulphuric acid treatment of mangel seed, B., 968.
- Donald, M. B., plastics in a chemical works, B., 466, 642. Fluid friction and heat transmission in fluids, B., 1121.
- See also Stevens, H. P.
- Donaldson, J. W., marine corrosion, B., 855.
- Donat, J. See Scholl, R.
- Donath, E. See Standard-I.G. Co.
- Donath, W. F. See Spruyt, J. P.
- Donau, J., microchemical determination of gold in presence of palladium and tin, A., 1096. Micro-determination of gold and silver in alloys, B., 678.
- Donauer, M. See Koppers Co. of Delaware.

- Doneddu, *F. P.*, maternal and foetal oxalæmia, A., 103.
- Doneen, *L. D.*, nitrogen in relation to composition, growth, and yield of wheat, B., 116. Preparation of green plant material for extraction of juices, B., 199.
- Donelson, *E.* See Hunscher, *H. A.*
- Donhoffer, *S.*, selective absorption of sugar, A., 522.
- Donleavy, *J. L.*, and Krise, *M. A.*, pyrimidines. CXLV. Alkamine ethers of the pyrimidine and quinazoline series, A., 759.
- Donley, *D.* See Youmans, *J. B.*
- Donnan, *F. G.*, molar (micellar) mass, electrovalency of ions, and osmotic pressure of colloidal electrolytes, A., 298.
- Donnelly, *J. F.*, and Donnelly Process Corp., conversion of hydrocarbon oils, (P.), B., 56.
- Donnelly, *J. L.*, action of water and alkali on coagulation of albumin, A., 1320.
- Donnelly, *W.* See Whessoe Foundry & Eng. Co.
- Donnelly Process Corporation. See Donnelly, *J. F.*
- Donnet, *E.* See Malméjac, *J.*
- Donnet, *V.* See Malméjac, *J.*
- Donohue, *W. J.*, separation of suspended solids from liquids by sedimentation or settling, (P.), B., 532.
- Donomae, *I.*, appearance of an acetylcholine-like substance in portal blood of the cat, A., 244.
- Donskova, *T.* See Berland, *A.*
- Dontcheff, *A.* See Nicloux, *M.*
- Dontcheff, *L.*, and Kayser, *C.*, anomalous respiratory quotients of hibernating animals, A., 387. Respiratory quotients less than 0.7 in certain poikilotherms, A., 1391.
- Donzelot, *P.*, and Chaix, *M.*, Raman spectra of substances with two benzene nuclei, A., 1301.
- Doohan, *W. P.* See Standard Oil Development Co.
- Doolan, *M. A.*, distribution of solids with a four-masscutite formula, B., 1062.
- Dooley, *A.* See Goodeve, *C. F.*, and Price, *N. J.*
- Dooley, *M. D.* See Rice, *F. O.*
- Doolittle, *A. K.*, spray-drying apparatus, (P.), B., 1073. Lacquer solvents in commercial use, B., 1151.
- Dopter, *P.*, and Frémont, (*Mlle.*) *T.*, absorption of nitrate- and ammonia-nitrogen by higher plants, B., 325.
- D'Or, *L.*, and Degard, *C.*, difference between specific heats of solid and liquid tin in the neighbourhood of the m.p., A., 155.
- Dorabalska, *A.*, heat of the penetrating radiation of radium, A., 275.
- Doran, *C. A.* See Du Pont de Nemours & Co., *E. I.*
- Dore, *W. H.* See Strain, *H. H.*
- Dorfman, *M.*, electron affinity of free radicals. IX. Pentaphenylethyl and triphenyldiphenylethyl, A., 1188. See also Bent, *H. E.*, and Müller, *Adolf.*
- Dorfman, *R. I.*, Gallagher, *T. F.*, and Koch, *F. C.*, nature of the oestrogenic substance in human male urino and bull testis, A., 1173.
- Dorfmüller, *G.* See Spengler, *O.*
- Dorier, *M.* See Roche, (*Mme.*) *A.*
- Dorman, Long & Co., Ltd., and Lewis, *J. S.*, treatment of [iron blast]-furnace slag for production of foamed slag, (P.), B., 998.
- Dornauf, *J.*, silumin- γ , B., 501.
- Dornbrook, *F. L.*, and Drewry, *M. K.*, apparatus for coking powdered coal and similar hydrocarbonaceous fuel, (P.), B., 55. Coking of powdered coal and similar hydrocarbonaceous fuel, (P.), B., 890.
- Dorner, *W.*, and Stähli, *J.*, annual reports of the experimental cheese factory, Treyvaux, 1931—1932 and 1932—1933, B., 1161.
- Dornov, *A.* See Leuchs, *H.*
- Doro, *B.* See Trost, *F.*
- Dorofeev, *D. S.*, ammonium sulphate from gypsum, B., 671.
- Dorokhov, *P. K.*, denicotinised cigarettes, B., 124. and Gonyak, *N. L.*, hydrochloric acid treatment of strong tobacco, B., 124.
- Doroschenko, *V. M.* See Deviatnin, *V. A.*
- Dorosinski, *L. S.* See Gnessin, *J. D.*
- Dorough, *G. L.* See Du Pont de Nemours & Co., *E. I.*
- Dorr Co., Inc., crystallisation, (P.), B., 883. and Gibbs, *R. C.*, rectangular clarifying or sedimentation tanks, (P.), B., 930. See also Becraft, *F. W.*, Besselièvre, *E. B.*, Darby, *G. M.*, Downes, *F. A.*, Fischer, *A. J.*, Hyde, *G. G.*, Maust, *E. J.*, Neill, *W. A.*, and Schaus, *A.*
- Dorr-Oliver Co., Ltd. See Dickinson & Co., Ltd., *J.*
- Dorrance, *R. L.*, corrosion [of iron], B., 311.
- Dorris, *T. B.*, Sowa, *P. J.*, and Nieuwland, *J. A.*, organic reactions with boron fluoride. VIII. Condensation of propylene with acids, A., 195.
- Dorseth, *R. F.*, and Gasoline Products Co., heating [of hydrocarbon] oils, (P.), B., 90.
- Dorsett, *W. C.* See Evans, *D. M.*
- Dorsey, *H. E.* See Enzor, *O. K.*
- Doškař, *J.* See Milbauer, *J.*
- Dosmanova, *O. P.*, gley formation, B., 163.
- Dosne, *H.*, coloured cellulose ester material, (P.), B., 450.
- Doss, *J. H.*, and Revere Copper & Brass, Inc., [brass] welding-rod alloys, (P.), B., 461.
- Doss, *K. S. G.*, and Iyer, *M. P. V.*, linking energies from Raman frequencies and thermochemical data, A., 1189.
- Dostal, *H.*, and Mark, *H.*, mechanism of polymerisation reactions. I, A., 1206.
- Dostál, *V.* See Dubský, *J. V.*
- Dostovalov, *B.*, dielectric constant and specific resistance of rocks, A., 1344.
- Dotterweich, *A. J.*, and Gen. Water Treatment Corp., water-softening apparatus, (P.), B., 610.
- Dotti, *L. B.* See Hrubetz, *M. C.*, and Riddle, *O.*
- Double, *I. S.* See Read, *H. H.*
- Dougan, *R. B.* See Hitchcock, *D. I.*
- Dougherty, *G.*, and Hammond, *P. D.*, reaction of sulphur with benzene in presence of aluminium chloride, A., 334.
- Doughty, *E. W.* See Eversole, *W. G.*
- Doughty, *I. N.* See Butterworth, *F. W.*
- Doughty, *J. L.*, phosphate fixation in soils, particularly as influenced by organic matter, B., 1107.
- Douglas, *R. W.* See Gen. Electric Co.
- Douglas, *S. R.*, and Hartley, *P.*, effect of dilute solutions of certain antiseptics on the viability of tubercle bacilli, A., 788.
- Douglas, *T. B.*, and Crockford, *H. D.*, calculation of heat of reaction from values of equilibrium constant at two temperatures, A., 304.
- Douglas-Sauermann, *A. G.*, analysis of small amounts of bile, A., 512.
- Douglass, *W. A.* See Du Pont de Nemours & Co., *E. I.*
- Doukine, *A.*, and Helman, *S.*, cholesterol and phosphate content of the blood of dairy cows, A., 373.
- Doulton & Co., Ltd., and Lorains, *J. P.*, preparation of ceramic raw materials, (P.), B., 540.
- Douthett, *O. R.*, and Barber Asphalt Co., treatment of bitumen, (P.), B., 936. Treated bitumen, (P.), B., 936.
- Dove, *A. B.*, corrosion and hot-galvanising of iron and steel, B., 1048.
- Dove, *L. P.*, dispersed [dye] pigments from organic carbonaceous earths, (P.), B., 15.
- Dove, *W. F.*, individuality in nutritive instincts and causes and effects of variations in selection of food, A., 1529.
- Dover, *M. V.*, and Helmers, *C. J.*, synthesis of tetratriacontadiene; its properties with special reference to oiliness, A., 728. and Hensley, *W. A.*, properties of Δ^2 -octadecene, *n*-octadecane, and dimethyllethane, B., 538.
- Dovey, *W. C.*, and Robinson, *R.*, triarylporyrylum borofluorides, A., 1504.
- Dow, *R. B.*, viscosity of mixtures of liquids at high pressures, A., 24. Pressure-volume-temperature relations for six [mineral] oils, A., 156. and Fenske, *M. R.*, pressure-volume-temperature relations for fractions of an oil, B., 890. See also Bridgman, *P. W.*
- Dow Chemical Co. and Barstow, *E. O.*, inhibiting nitridation of magnesium, (P.), B., 680. Casting of magnesium and alloys thereof, (P.), B., 730.
- Boundy, *R. H.*, and Pierce, *J. E.*, treatment of deep wells, (P.), B., 394.
- and Britton, *E. C.*, phenylphenols [hydroxydiphenyls], (P.), B., 297. [Aromatic] hydroxy-ketones, (P.), B., 348.
- Britton, *E. C.*, and Bryner, *F.*, chlorophenylphenol [3- and 5-chloro-2-hydroxydiphenyl], (P.), B., 716.
- Britton, *E. C.*, Coleman, *G. H.*, and Hadler, *B. C.*, chlorination of aromatic hydrocarbons, (P.), B., 182.
- Britton, *E. C.*, Coleman, *G. H.*, and Moore, *G. V.*, manufacture of alkylene chlorohydrins and aliphatic esters conjointly, (P.), B., 1130.
- Britton, *E. C.*, Coleman, *G. H.*, and Warren, *G. W.*, treatment of chlorinated isobutane, (P.), B., 1085.
- Britton, *E. C.*, Martin, *L. F.*, Alquist, *F. N.*, and Heindel, *R. L. jun.*, hexachlorophenol, (P.), B., 621.
- Britton, *E. C.*, and Mills, *L. E.*, [glue] preservative, (P.), B., 513. [Plant] insecticides, (P.), B., 969.
- and Brooks, *M. E.*, magnesium-base alloys, (P.), B., 680.
- Burdick, *E. C.*, and Gross, *W. H.*, surface treatment of magnesium and magnesium-base alloys, (P.), B., 274.
- and Collings, *W. R.*, processing calcium chloride solution, (P.), B., 672.
- Gann, *J. A.*, and Brooks, *M. E.*, magnesium alloys, (P.), B., 909.
- Gann, *J. A.*, Reynolds, *F. L.*, and Winston, *A. W.*, magnesium-base forging alloy, (P.), B., 858.
- Grant, *L. B.*, and Grant, *O. E.*, magnesium-base die-casting alloys, (P.), B., 274.

- Dow Chemical Co., and Grebe, J. J., storing and using heat [of steam plants], (P.), B., 83.
- Grebe, J. J., and Boundy, R. H., controlling oxidation of halide solutions to liberate free halogen [bromine from brine], (P.), B., 187.
- Grebe, J. J., Coleman, G. H., and Reilly, J. H., gaseous olefines, (P.), B., 343.
- Grebe, J. J., and Reilly, J. H., conducting chemical reactions in alkaline media [preparation of phenol], (P.), B., 1037.
- and Heath, S. B., purifying calcium chlorate, (P.), B., 306.
- and Koenders, J. W., friable caustic soda, (P.), B., 269.
- Lowry, R. D., and Reynolds, F. L., rolling magnesium alloy, (P.), B., 107.
- Martin, L. F., and Coleman, G. H., cyclohexyl-aromatic hydrocarbons [and chloro-derivatives], (P.), B., 716.
- and Mills, L. E., anhydrous alkali phenoxides, (P.), B., 183. Nicotine salts of 2:4-dinitrophenol and substituted derivatives thereof [insecticides], (P.), B., 381. Acid halides, (P.), B., 397.
- Nutting, H. S., and Petrie, P. S., fluorinated methane[s], (P.), B., 347.
- Nutting, H. S., Petrie, P. S., Croope, D. H., and Huscher, M. E., separation of ethylene and preparation of alkyl halides from olefine mixtures, (P.), B., 1084.
- and Pelton, E. L., oxidation of alicyclic aldehydes and ketones [to acids], (P.), B., 348.
- Perkins, R. P., and Dietzler, A. J., adipic acids, (P.), B., 297.
- Perkins, R. P., Dietzler, A. J., and Burdick, E. C., inhibiting discoloration of aromatic compounds, (P.), B., 761.
- Perkins, R. P., Dietzler, A. J., and Lundquist, J. T., *tert*-alkylphenols, (P.), B., 716.
- and Prutton, C. F., phenoplastic, (P.), B., 111. Crystallisation of calcium chloride [from brine mother-liquors], (P.), B., 1092.
- and Reimers, H. A., casting magnesium, (P.), B., 909. Purification of water, (P.), B., 1072.
- and Stewart, L. C., porous magnesia cement, (P.), B., 994. Lime mortar and plaster, (P.), B., 1097.
- Stewart, L. C., and De Pree, L., stabilised chlorinated aliphatic hydrocarbon, (P.), B., 715.
- Stoesser, W. C., and Marschner, R. F., di-diphenyl [bisdiphenyl] oxides, (P.), B., 716. Sodium diphenyl-*p*-sulphonate, (P.), B., 939.
- Strosacker, C. J., and Kendall, H. S., thermal decomposition of hydrocarbons, (P.), B., 1126.
- Strosacker, C. J., Kennedy, C. C., and Pelton, E. L., alkali acetates, (P.), B., 899.
- and Williams, W. H., polyphenyls, (P.), B., 840. Apparatus [electric furnace] for producing diphenyl, (P.), B., 939.
- Dowd, O. J., internal atmosphere of apples, A., 419.
- Dowdell, R. L., treatment of steel for permanent magnets, B., 151.
- See also Hughes, T. P., and Nielsen, H. P.
- Downes, A. W. See Kahlenberg, L.
- Downes, F. A., and Dorr Co., Inc., sewage aerator, (P.), B., 1072.
- Downes, H. R., and Richards, L., concentration of the antidiuretic factor of the anterior lobe of the pituitary, A., 1032.
- Downes, K. W. See Campbell, A. N.
- Downie, C. C., smelting complex type [-metal] ashes, B., 104. New use for cobalt [in mordanting], B., 897.
- Downing, E., and Orr, W. B., preparation and cationoid reactivity of dichlorodinitromethane, A., 62.
- Downing, F. B. See Du Pont de Nemours & Co., E. I.
- Downing, V. See Shaw, J. L.
- Downing, W. F., *jun.* See Gearing, M. J.
- Downs, C. R., gas-conditioning apparatus, (P.), B., 659.
- Downs, F. E., Martin, E. L., and Russell, E. F., flotation reagent, (P.), B., 908.
- Downs, L. H. See Rose, Downs, & Thompson, Ltd.
- Dowsett, C. W., and John, W. E., cyaniding auriferous materials, (P.), B., 556.
- Doyle, J. A., basic requirements of the [ceramic] firing process, B., 725.
- Doyle, J. D., and Doyle, M. K., gas battery, (P.), B., 662.
- Doyle, M. K., Caton, E. L., and Malone, J. J., electric storage batteries; [lead accumulators], (P.), B., 812.
- Doyle, J. E. See Chamberlain, J. S.
- Doyle, M. E. See Robertson, E. C.
- Doyle, M. K. See Doyle, J. D.
- Doyle, W. M. See Bannister, C. O.
- Doyle, W. T. See Sturtevant Mill Co.
- Doyne, H. C., tropical soils; increase of acidity with depth, B., 565.
- See also Martin, F. J.
- Dozois, K. P., and Rauss, K. F., relationship between electrophoretic migration velocities, virulence, and types of diphtheria and diphtheria-like bacilli, A., 1542.
- Drabkina, R. J., carbohydrate metabolism in tuberculosis, A., 386.
- Drabkina, S. See Blochinzev, D.
- Dräger, B., medium for detecting impurities in gases, (P.), B., 900.
- Dragan, C. See Dziwowski, K.
- Dragišić, B., and Varićak, B., comparative toxicity of aqueous extracts of *Ustilago maidis* and ergot preparations, A., 1532.
- Drago, E. See Lucentini, R.
- Dragstedt, L. R., effect of diverting adrenal-vein blood into the portal vein on blood-sugar of dogs, A., 127.
- Dragulescu, C. See Rădulescu, D., and Spacu, G.
- Dragunov, S. S., humic fertilisers. I., B., 165. Characterisation of humic acids by the content of carboxyl and hydroxyl groups and nitrogen compounds, B., 1156.
- and Bachtina, E. F., humic fertilisers. III. Nitrogenous constituents of natural humic acids, B., 1059.
- Kiprianov, A. A., Natkina, A. I., and Tschesalkina, P. A., humic fertilisers. II. Influence of ammonia and chlorine on organic constituents of peat, B., 324.
- Draisbach, F. See Chem. Fabr., J. A. Benckiser G.m.b.H.
- Drake, B. M. See Wells, H. S.
- Drake, M. E., and Stuhr, E. T., pharmacological and bactericidal properties of umbellulone, A., 780.
- Drake, N. L., and Jacobsen, R. P., cerin and friedelin. I. Their mol. wts. and empirical formule, A., 1373.
- and Shrader, S. A., cerin and friedelin. II. Functional derivatives, A., 1502.
- and Spies, J. R., croton resin. III. Combined acids, A., 527.
- See also Kline, G. M.
- Drake, T. G. H., Tisdall, F. F., and Brown, A., relative antirachitic values of cod-liver oil, viosterol, and irradiated milk, A., 417.
- Dranitzina, C. A. See Klebanski, A. L.
- Draper, R. B., synthesis of magnesioferrite: observations on "mineralisation," A., 1099.
- Drath, G., and Wesemann, F., working of Upper Silesian steelworks' gas producers, B., 52.
- Draves, C. Z. See Du Pont de Nemours & Co., E. I.
- Drechsel, F., [finishing] treatment of [cellulose] fibrous materials, (P.), B., 1140.
- Drees, K., and Kowalski, G., heating of bright and dull coals with dilute alkali solutions under pressure, B., 131. Decomposition of phenoxide liquors by means of an electric current, B., 885.
- Dreessen, W. C., and Valle, J. M. D., effects of exposure to dusts in two Georgia talc mills and mines, B., 926.
- Dreher, E. See Staudinger, H.
- Drehschmidt, H., coke ovens, (P.), B., 661.
- Drekter, I. J., Bernhard, A., and Leopold, J. S., extraction of cholesterol from blood-serum, A., 1261.
- See also Bernhard, A.
- Dresel, I., effect of prolactin on the estrus cycle of non-parous mice, A., 1284.
- Dresher, A. C. See Yoder, J. D.
- Dressel, J. See Hertel, E.
- Dressler, P. d'H., and Swindell-Dressler Corp., continuous tunnel kiln, (P.), B., 1095.
- Drevon, B., volumetric determination of chlorine in biological fluids rich in lipins, A., 906. Determination of hydroxydimorphine, A., 1260.
- Drew, E. F., detergent compound, (P.), B., 416.
- Drew, H. D. K., interpretation of the phenoxtellurine dibisulphate reaction with platinum compounds; microanalysis of platinum and tellurium, A., 100.
- and Landquist, J. K., mixed m.p. in eutropic series, A., 1456.
- and Tress, H. J., plato- and plati-diamines containing methylamine, A., 1229. Wolfram's red salt and the possibility of tervalent platinum, A., 1487.
- Tress, H. J., and Wyatt, G. H., micro-determination of platinum and iridium, and of associated chlorine and potassium, A., 56.
- Drew, J. See Black, T.
- Drew, J. P., O'Sullivan, G. F., and Deasy, D., grass silage, B., 1162.
- Drew, R. G. See Minnesota Mining & Manuf. Co.
- Drew, W., and Edge, M. T., impact pulverisers, (P.), B., 657.
- Drewry, M. K. See Dornbrook, F. L.
- Drews, B., sulphur dioxide in [beet] molasses, B., 119.
- Drewsen, P., and Hinde & Dauch Paper Co., forming paper for corrugating purposes, (P.), B., 1041.

- Drewski, K.**, potentials of electrodes in non-aqueous solutions, A., 305. Potentiometric determination of iodine values, B., 633.
- Drexler, E.**, and **Issekutz, B. von, jun.**, action of thyroxine on metabolism of cold-blooded vertebrates, A., 540.
- Dreyer, C. B.**, and **Boeger, H. F.**, kinematography, (P.), B., 255.
- Dreyer, K. L.** See **Tammann, G.**
- Dreyer, N. B.**, and **Hebb, C. O.**, effect of some barbituric acid derivatives on the intestine of the cat, A., 1019.
- Dreyfus, C.**, [soaking] treatment of organic derivative of cellulose fabric, (P.), B., 19. Coated article [flexible glass substitute], (P.), B., 195. Tubes [containing cellulose derivatives], (P.), B., 351. Protection of cellulose-derivative surfaces, (P.), B., 402. Improved [cellulose ester or ether] fabric, (P.), B., 402. Dyeing of [cellulose derivative] textile materials, (P.), B., 670. Textile material, (P.), B., 1138.
- Schneider, G.**, and **Celanese Corp. of America**, treatment of cellulose derivatives, (P.), B., 17. Treatment of substitution derivatives of cellulose, (P.), B., 144. Synthetic resin and composition containing the same, (P.), B., 321.
- Whitehead, W.**, and **Celanese Corp. of America**, spinning of artificial filaments, (P.), B., 223. Apparatus for making yarns, (P.), B., 300. Treatment [delustring of [textile] material containing organic esters of cellulose, (P.), B., 848.
- Dreyfus, H.**, filaments, yarns, ribbons, fabrics, etc., containing cellulose esters, (P.), B., 17. Artificial filaments, yarns, ribbons, films, etc., (P.), B., 17. Plastic materials, (P.), B., 33. Plasticised compositions and articles made therefrom, (P.), B., 33, 161. Cellulose derivatives, (P.), B., 96. Artificial filaments, etc., (P.), B., 96. Manufacture and application of plasticisers [for cellulose derivatives and synthetic resins], (P.), B., 161. Cellulose from lignocellulosic materials, (P.), B., 184. Manufacture and treatment of artificial filaments, yarns, etc., containing organic derivatives of cellulose, (P.), B., 224. Manufacture or treatment [stretching] of artificial filaments, threads, yarns, ribbons, etc., (P.), B., 300. Aliphatic anhydrides, (P.), B., 348, 442. Production of volatile compounds by fermentation, (P.), B., 376. Production of organic compounds by fermentation, (P.), B., 376. Distillation of coal or other solid carbonaceous materials, (P.), B., 439. Acetaldehyde, (P.), B., 443. Hydrolysis [products] of cellulose, (P.), B., 447. Manufacture and use of cellulose derivatives, (P.), B., 588. Cellulose, (P.), B., 588. Hydrocarbon gases, (P.), B., 661. Artificial filaments, yarns, fabrics, etc., (P.), B., 720. Filaments, foils, and similar materials having a basis of organic derivatives of cellulose, (P.), B., 765. Saponification of filaments, threads, yarns, fabrics, etc., having a basis of organic ester of cellulose, (P.), B., 846. Saponification of materials comprising cellulose esters, (P.), B., 943. Saponification of cellulose esters, (P.), B., 943. See also **Brit. Celanese, Ltd.**
- Dreyfus-Sée, G.** See **Lesné, E.**
- Dreyfuss, M.**, separation of argillaceous fraction of sedimentary rocks, A., 323.
- Dreyfuss, P.**, condensing power of pyrocatechol derivatives, A., 1362.
- Dreyspring, C.**, and **Heinz, W.**, simultaneous determination of easily soluble phosphate and fixation of manurial phosphate in soils, B., 37. Suction apparatus for complete removal of soil extracts from the soil mass, B., 565. See also **Krügel, C.**
- Driabchlitzin, F.** See **Danilov, S. N.**
- Driel, M. van**, system $\text{HgCl}_2\text{-PbCl}_2$, A., 1204.
- Driessens, J.** See **Carrière, G.**, **Grandclaude, C.**, **Lambret, O.**, and **Polonovski, M.**
- Drift, A. J. W. van der**. See **Snijders, C. J., jun.**
- Drigalski, W. von**, local vitamin action with cod-liver oil bandages, A., 129. Vitamin-C in pigment metabolism, A., 669. Vitamin-C content and reducing power of normal and pathological urine, A., 793. Avitaminosis- B_2 and pellagra in rats; biological investigation of vitamins, A., 1175. B-Vitamins as substitute for insulin, A., 1286.
- Driggers, B. F.**, and **Pepper, B. B.**, comparison of arsenicals, arsenicals with oil, and several nicotine compounds used against the codling moth, B., 326. Fixed nicotine compounds in codling-moth control, B., 742.
- Driggs, F. H.** See **Westinghouse Lamp Co.**
- Drigo, A.**, vectorial properties of ferromagnetic substances and magnetic structure of polycrystalline materials, A., 19. Energetic and magnetic anisotropy in polycrystalline ferromagnetic plates in a magnetic field, A., 435. Secondary phenomena of penetrating radiation in lead. I. and II., A., 804. Electrical resistance of iron below the Curie point and the resistance anomaly of ferromagnetic materials, A., 1062. See also **Alocco, G.**
- Drilhon, A.**, effect of salinity variations on alkaline reserve of blood of *Crustacea*, A., 509. [Total circulating] calcium and moulting of brachyural *Crustacea*, A., 524. Alkaline reserve during metamorphosis of *Lepidoptera*, A., 652. Alkaline reserve, p_H , and shell-casting of brachyural *Crustacea*, A., 652. and **Florence, G.**, physico-chemical studies of fish blood; neutralisation and buffer-coefficient curves, A., 771. See also **Florence, G.**
- Drilhon, M.** See **Villaret, M.**
- Drinberg, A.**, and **Vedenskaja, E. E.**, ageing of cellulose nitrate films, B., 540.
- Drinberg, A. J.**, preparation of drying oils from synthetic acids and petroleum-cracking polymerides, B., 318.
- Blagonravova, A. A.**, and **Frik, E. M.**, lac resins obtained by nitration of petroleum hydrocarbons, B., 319.
- Dring, G.**, newer types of phenolic resins in oil varnishes, B., 69.
- Drinker, C. K.** See **Field, M. E.**
- Driscoll, M.** See **Grabfield, G. P.**
- Drishaus, I.** See **Tettweiler, K.**
- Driver, J. E.**, and **Turner, H. A.**, presence of manganese in commercial lime and bleaching powder, B., 589.
- Driver Harris Co.**, heat-treating furnaces, (P.), B., 753, 785.
- Droege, K.**, copying process for zincography, (P.), B., 334.
- Drogin, I.**, outline of carbon black, B., 932.
- Drop, J.**, explosion regions at reduced pressure. I. Pressure limits in the system $\text{H}_2\text{-O}_2\text{-N}_2$, A., 1080.
- Drosdoff, M.**, separation and identification of mineral constituents of colloidal clays, B., 819. and **Truog, E.**, removing and determining the free iron oxide in soil colloids, B., 645.
- Drost, G.**, filtration of lacquers and paints, B., 366.
- Droz, K. E.** See **Garman, R. J.**
- Drozdov, N. S.**, and **Tscherntzov, O. M.**, action of secondary amines on epichlorohydrin, A., 202. Alkaline hydrolysis of glycerol chlorohydrins, A., 605. See also **Tscherntzov, O. M.**
- Drozzina, V.**, and **Janus, R.**, new magnetic alloy with a very large coercive force, A., 159.
- Druce, J. G. F.**, magnesium perchlorate ("anhydron") as a drying agent, A., 321. Rhenium oxythiocyanate, A., 593.
- Drucker, C.**, salt effect in concentrated solutions; change in the heat of solution of potassium chloride by other electrolytes, A., 935.
- Druckersetzor Ges.m.b.H.**, electrolytic [pressure] decomposing devices [for electrolysing water], (P.), B., 193.
- Druetzka, O.**, density and stability of cellulose nitrate explosives, B., 655.
- Druey, J.**, preparation of *o*-, *m*-, and *p*-hydroxyphenoxyalkylamines, A., 1361. See also **Fourneau, E.**
- Drug Products Co., Inc.**, therapeutic agent and manufacture of colloidal calcium malate, (P.), B., 839. Preparation of an isotonic solution of colloidal sulphur for injection purposes, (P.), B., 973. See also **Torigian, J.**
- Druiif, J. H.**, minerals of Poeloe Berhala (Malacca Strait, Sumatra), A., 1100.
- Drumm, P. J.** See **Reilly, J.**
- Drummond, A. A.** See **Imperial Chem. Industries.**
- Drummond, D. G.**, infra-red spectra of silica, A., 10. Refractive indices of quartz in the infra-red, A., 148.
- Drummond, J. C.**, addition of substances to foodstuffs affecting their nutritive value, B., 922. and **Macwalter, R. J.**, pro-vitamin-A in the food of whales, A., 1427.
- Singer, E.**, and **Macwalter, R. J.**, unsaponifiable fraction of wheat-germ oil: vitamin-E, A., 418, 1551. See also **Thorbjarnarson, T.**
- Drury, D. R.**, sugar utilisation in eviscerated rabbits, A., 1409.
- Drushina, O. S.** See **Iskoldski, I. I.**
- Druyvesteyn, M. J.**, electron diffusion, A., 4. Electrophoresis in the positive column of a gas discharge, A., 566.
- Dry Milk Co., Inc.** See **Supplee, G. C.**
- Dryer, C. G.**, **Lowry, C. D., jun.**, **Egloff, G.**, and **Morrell, J. C.**, pure hydrocarbon standard for evaluating inhibitors, B., 535. Inhibitors in cracked gasoline. III. Storage stability as related to induction period and critical oxidation potential, B., 582. See also **Lowry, C. D., jun.**

- Dryerre, H., and Greig, J. R., specific chemotherapy of milk-fever by the parenteral administration of calcium borogluconate, A., 775.
- Drysdale, W. See Drysdale & Co., Ltd.
- Drysdale & Co., Ltd., and Drysdale, W., condensate extraction systems, (P.), B., 754.
- Dshan-Puschkin, M. N., tobacco-seed oil, B., 1054.
- See also Dshons, V. N.
- Dshons, V. N., Sergeeva, M. G., and Dshan-Puschkin, M. N., influence of feeding on composition and properties of beef suet, B., 1066.
- D'Silva, J. L., action of adrenaline on serum-potassium, A., 539.
- Dubaquié. See Chelle.
- Dubaquié, J., white casse [in wines], B., 41. Mechanism of action of copper sprays against mildew, B., 473.
- Dubar, L., influence of occluded gas and vapours on the electrical conductivity of cuprous oxide, A., 1055.
- Dubashinskaja, S. M. See Tseherkess, A. I.
- Dubbs, C. P. See Universal Oil Products Co.
- Du Bois, D. See Himwich, H. E., and Rakieten, N.
- Dubois, G., dehydration of alcohol by distillation under partial vacuum, B., 41.
- Dubois, P., hydrate and allotropic forms of manganese sesquioxide, A., 181. Oxidation of manganous sulphate by hydrogen peroxide in an alkaline medium, A., 181. Decomposition of permanganic acid and manganese dioxide, A., 716. Oxides of manganese; structure of mixed crystals, A., 946.
- and Rencker, E., dilatometric study of dehydration and thermal decomposition of manganese compounds, A., 314.
- Dubouloz, P., changes in oxidation-reduction potential of a glucose solution under the influence of light and a photosensitizer, A., 38.
- Dubovitzki, A. See Volkovitsch, S.
- Dubowik, J. A., functional correlations between the anterior pituitary and the ovary, A., 1284.
- Dubrisay, R., applications of a method of capillary analysis, A., 29. Action of sulphur on silver, A., 1212. Sulphur and sulphur compounds in motor fuels, B., 7.
- and Emsehwiller, G., oxidation of iodoform [and carbon tetraiodide] solutions, A., 454.
- and Lafuma, H., refractory hydraulic cements, B., 308.
- Dubrovski, A. M. See Domnitsch, K. M.
- Dubský, J. V., cobalto-complexes, A., 946.
- and Berger, T., complex salts of tartar emetic, A., 312.
- and Dostál, V., the complex compounds $[MX_2 \cdot 2A]$ and $[MX_2]H_2 \cdot 2A$, A., 222.
- Krametz, B., and Trtilek, J., new metallic complexes of cyanogen compounds, A., 1252.
- Kuraš, M., and Trtilek, J., formation of salts of amidoximes and benzhydroxamic acid, A., 479.
- and Okáč, A., reactions of bismuthiol, A., 1515.
- Okáč, A., and Trtilek, J., detection of bismuth with sulphur-containing organic reagents. IV, A., 721. Bismuth-characterising groups, A., 1096. Reactions of bismuth with organic hydrosulphides. I, A., 1515.
- Dubský, J. V., and Trtilek, J., heteroformato-salts of calcium, A., 195. Reaction of aminobenzoic acids with cadmium and zinc salts, A., 719. Reaction of bismuth salts with products of condensation of bis-phenylthiocarbamide, A., 1136.
- and Vinogradova, D., hetero-compounds of glycollic acid, A., 196.
- and Wagner, E., micro-detection of magnesium and aluminium with alkannin and naphthazarin; relation of alkannin to naphthazarin, A., 837.
- Du Buy, H. G., phototropism of the *Avena* coleoptile and the theory of the light-intensity gradient, A., 418.
- Ducas, P. See Nobécourt, P.
- Duce, W., action of heat on proteins in solution, A., 1141.
- Ducellier, G., possibilities of development of micro-organisms in an unfavourable medium, A., 662.
- Du Chaffaut, R. See Du Pont de Nemours & Co., E. I.
- Duchemin, E., influence of light on periodic precipitations in gelatinous media; precipitation of silver chromates, phosphate, and arsenate, A., 580. Hydrates of magnesium sulphate and some double salts of magnesium, A., 591.
- Dnehène, R. See Aubert, M.
- Duchesne, J. See Désirant, M.
- Duchesnoy, V., retarding effect of metallic salts on coagulation of viscose, B., 398, 623.
- Duchoň, F., red mould in wheat, B., 472.
- Duckert, R. See Gutzeit, G.
- Duckitt, W. See Moss Gear Co.
- Duckworth, J., preparation of semipermeable sac-membranes, A., 554.
- See also Godden, W.
- Duclaux, J. P. E., influence of light on the anodic polarisation of tungsten, A., 937.
- Duczko, K., electrosynthesis of silver, tin, and zinc amalgams and their chemical structure, A., 1330. Preparation and physicochemical properties of silver, tin, and zinc amalgams, B., 500.
- Dudkina, T. See Lutenberg, C.
- Dudley, A. T. See Texas Co.
- Dudley, H. C., and Byers, H. G., determination of selenium in animal matter and clinical test in urine, A., 554.
- Dudley, H. W., ergometrine, A., 894, 1512.
- and Moir, C., substance responsible for the traditional clinical effect of ergot, A., 655. New active principle of ergot, A., 1157.
- Dudley, S. F., toxic nephritis following exposure to carbon tetrachloride and smoke fumes, A., 895.
- Dudycha, J. A., and Peterson, B. H., salt effect of certain indicators in slightly buffered solutions, A., 1325.
- Duecker, W. W., admixtures improve properties of sulphur cements, B., 61.
- See also Hamor, W. A., and Rueckel, W. C.
- Düll, A., diastase-forming bacteria, A., 664. Diastatically active yeasts, B., 284.
- Dürichen, W. See Müller, Friedrich.
- Dürrwaechter, effect of fish meals of varying fat and salt content on fattening and carcass quality, B., 379.
- Dürst, E., and Dürst, O., jun., extrusion presses for freeing kneaded masses from gases, (P.), B., 754.
- Dürst, O., jun. See Dürst, E.
- Duesberg, O., practical application of pine oil in soap-making, B., 597.
- Düsing, W. See Wolf, L.
- Duez, P., separation and determination of titanium and vanadium in cast iron, B., 358.
- Dufay, J., emission spectrum of the night sky. I. Ultra-violet, A., 3.
- See also Cabannes, J.
- Dufaycolor, Ltd., Baker, T. T., Lamboit, P., and Chapman, W., colour photography, (P.), B., 255.
- See also Baker, T. T., and Murray, H. D.
- Duff, C. E., preservative tests and durability trials with native timbers of the copper belt of Northern Rhodesia, B., 994.
- Duff, D. A., and Ingold, C. K., modes of addition to conjugated unsaturated systems. VII. Addition of hydrogen cyanide and methyl malonate to methyl cinnamylidenemalonate, A., 976.
- Duff, J. D., Dietrich, L. E., and Duff & Sons, Inc., P., dehydrated flour mix, (P.), B., 285.
- Duff & Sons, Inc. See Duff, J. D.
- Duffek, V. See Maass, E.
- Duffendack, O. S., and Smith, R. W., effect of a small admixture of a foreign gas on conductivity of a rare gas irradiated by its own resonance radiation, A., 12.
- and Wolfe, R. A., quantitative spectral analysis, (P.), B., 788.
- See also Emeléus, K. G., Manley, J. H., and Smith, R. W.
- Duffield, F. L., reduction of iron ores, (P.), B., 234. Production of copper from copper sulphide ores, (P.), B., 680.
- Duffieux, M., influence of the chemical medium on bands of the second positive group of nitrogen, A., 1045. Phosphorescence of nitrogen peroxide; intensity of bands of the second positive group of nitrogen, A., 1051.
- Dufford, R. T., photovoltaic effect, A., 148.
- See also Asling, W. L.
- Dufraisse, C., [di-radical formula of rubeno and constitution of its dissociable peroxide], A., 205.
- and Badoche, M., relations between the optical properties of the medium and the photochemical constants of tetraphenylrubene; absorption spectrum, A., 680. Relations between the optical properties of the medium and the photochemical constants of tetraphenylrubene, A., 713.
- and Étienne, A., dissociable organic oxides; reversible oxidisability of the anthracene structure: dissociable oxide of 9:10-diphenylanthracene, A., 1233.
- and Gérard, M., dissociable organic oxides and the anthracene structure; existence of a photo-oxide of anthracene: its thermal decomposition, A., 1488.
- and Girard, R., synthesis of the blue hydrocarbon $C_{30}H_{18}$, 9:12:10:1-diphenylenanthracene or 1:1':3:3'-diphenylenrubene, from dibenzoylmethane, A., 76.
- and Loury, M., dissociable organic oxides; ethyl 1:1'-diphenylrubeno-3:3'-dicarboxylate; its dissociable oxide, A., 213. Dissociable organic oxides; 1:1'-diphenylrubene, $C_{30}H_{20}$; thermal decomposition of its photo-oxide, $C_{30}H_{20}O_2$, A., 969.

- Dufrenoy, J., effect of zinc on growth of *Vitis*, A., 672. Use of methylal for inclusions in paraffin, A., 1043.
- and Reed, H. S., pathological effects of deficiency or excess of certain ions on citrus leaves, A., 266.
- See also Reed, H. S.
- Dugal, L. P., total chlorine and dissolved oxygen contents of the St. Lawrence estuary, 1932-1933, B., 1024.
- Duggan, H. See Grasselli Chem. Co.
- Duggar, B. M., and McAlister, D. F., factors affecting "longevity" *in vitro* of viruses of tobacco mosaic and of tobacco ring spot, A., 798.
- Duggar, J. F., nodule numbers on legumes as affected by manuring, B., 422. Nodulation of peanut plants as affected by variety, shelling, and disinfection of seed, B., 689.
- Duhm, B., diffusion of hydrogen in palladium, A., 692.
- Duintjer Wilkens Meihuizen & Co. Naamloze Vennootschap, and Meulen, J. H. van der, soluble starch, (P.), B., 329. Starch products, (P.), B., 694.
- Duke, J. A. H., Athawale, D. Y., and Mathur, P. N., mustard seeds and oils of U.P., B., 732. Development of desired odour and flavour in mustard oil expressed by means of expellers, B., 732.
- Duke-Elder, W. S., physicochemical factors affecting intra-ocular pressure, A., 1144.
- and Davson, H., vitreous body, A., 771.
- Robertson, E. B., and Davson, H., vitreous body. I., A., 232.
- Dulac, J. See Maume, L.
- Dulière, W. L., determination of chlorine in blood, A., 1262.
- and Minne, R., calcium and phosphorus in human cerebrospinal fluid, A., 648. Sodium content of normal cerebrospinal fluid, A., 773.
- Dulik, K. See Prüfer, H.
- Dulitzkaja, R. A., isoelectric point of gelatin, A., 1202.
- See also Sokolov, S. I.
- Dull, M. F. See Hurd, C. D.
- Dull, R. B., spectrum of boron fluoride, A., 562.
- Dullenkopf, W. See Hevesy, G. von.
- Dulou, R., preparation of ketonic terpenes, A., 348. Action of hydrogen sulphide on ketonic terpenes, A., 348. Action of acetylene and its dimagnesium derivatives on ketonic terpenes, A., 349. Raman spectra of ketonic terpenes, A., 429. Cryoscopic properties of terpenes, A., 436.
- See also Dupont, G.
- Dulzetto, F., glutathione in the aestivation of *Helix aperta*, Born., A., 890.
- Dumanski, A. V., and Markevitch, I. T., effect of temperature on stability of a hydrosol of iron hydroxide in an alcohol-ether mixture, A., 700.
- and Tjashelova, T. P., application of physico-chemical analysis to investigation of peptisation. II. Peptisation of wheat-flour proteins, A., 165.
- and Tschapek, M. V., heat of wetting. I. Influence of adsorbed ions. II. Influence of adsorbed air on the heat of wetting, A., 930, 1071.
- Dumas, R. See Gen. Electric Co.
- Dumas, Y. See Morel, A.
- Dumazert, C., iodometric micro-determination of blood-sugar, A., 642. Determination of blood-sugar. I. De-proteinisation with cadmium hydroxide. II. Iodometric micro-determination of blood-sugar, A., 1518.
- and Bierry, M., mercury-cadmium de-proteinisation and micro-iodometric determination of blood-sugar, A., 1000.
- and Passelaigue, P., ascorbic acid in vitreous humour of the ox eye, A., 416.
- See also Bierry, M., and Malméjac, J.
- Dumbreck, J. C., deodorant preparation for treatment of the skin, especially feet and hands, (P.), B., 576.
- Dummet, G. A., and Stancey, R., assessment of carbonising properties of coal. I., B., 339.
- DuMond, J. W. M., and Youtz, J. P., selective X-ray diffraction from artificially stratified metal films deposited by evaporation, A., 1449.
- Dumont, C. See D'Amour, F. E.
- Dumont, E. See Hertel, E.
- Dumont, P. See Plantin, B.
- Dunagan, W. M., testing materials [e.g., concrete mix], (P.), B., 1097.
- Dunbar, A. See Rule, H. G.
- Dunbar, G., developments in textile chemicals for dyeing and finishing, B., 301.
- See also Imperial Chem. Industries.
- Dunbar, T. L., treatment of sulphite pulp and liquor, (P.), B., 143. Digestion [of pulp], (P.), B., 721. Digestion of fibrous material, (P.), B., 896.
- Fulton, G. E., and Chemipulp Process, Inc., pulp, (P.), B., 1089.
- Dunbrook, R. F., and Firestone Tire & Rubber Co., [mercaptoaryl]thiazoles, (P.), B., 297.
- and Zimmermann, M. H., preparation of 1-thiolbenzthiazole, A., 364.
- Duncan, A. B. F., absorption spectrum of acetone vapour in the far ultra-violet, A., 562. Ultra-violet absorption spectrum of ammonia, A., 912. Vibrations of polyatomic molecules in excited electronic states, A., 1057.
- and Howe, J. P., ultra-violet absorption of methane, A., 144.
- See also Noyes, W. A., jun.
- Duncan, C. W., Huffman, C. F., and Robinson, C. S., magnesium in calves. I. Tetany produced by ration of milk or milk with various supplements, A., 386.
- See also Moore, L. A.
- Duncan, D. R. See Cheesman, G. H.
- Duncan, F. S., durable horn-like material, (P.), B., 721.
- Duncanson, W. E., range-velocity relation for α -particles and protons, A., 275.
- See also Miller, H.
- Dunker, L. See Ruschmann, G.
- Duncombe, G. H. See Carter, W. K.
- Dunegan, J. C. See Roberts, J. W.
- Dunez, A. See Demolon, A.
- Dunham, A. R., carbon monoxide testing device, B., 493.
- Dunham, H. V., adhesive, (P.), B., 740. Transparent film or layer, (P.), B., 987.
- and Casein Manufg. Co. of America, sized paper, (P.), B., 401.
- Dunham, R. A., and Union Oil Co. of California, reclaiming spent doctor solutions, (P.), B., 983. Soluble drier for paints and varnishes, (P.), B., 1004.
- Dunkerley, H. M., and Brush Electrical Eng. Co., homogenisers, (P.), B., 83.
- Dunkle, H. H. See Phillips, A.
- Dunlop, G., calcium, phosphorus, and vitamin-D requirements of swine, A., 393. Effect of growth-promoting, appetite-stimulating, or "physin" factor on live-weight increase of swine, A., 1175.
- Dunlop, (Miss) H. G., Macrae, T. F., and Tucker, S. H., dicarbazyls. VI. Synthesis of 1:1'-dicarbazyl, A., 95.
- Dunlop, S. H., liquid fuels from coal for naval purposes, B., 212.
- Dunlop Plantations, Ltd., and Murphy, Edward A., coating a metallic surface with fusible material or substance, (P.), B., 909.
- Dunlop Rubber Co., Ltd., and Healey, J., producing rubber thread, (P.), B., 862.
- Lacey, B. W. D., and Clarke, W. V., bonding of rubber, etc., to metal and other surfaces, (P.), B., 733.
- Lacey, B. W. D., and Palmer, L., vulcanisation of rubber, (P.), B., 70.
- Livingston, G., and Lacey, B. W. D., attaching a rubber or similar composition to another surface, (P.), B., 35.
- and Tidmus, J. S., decorating mouldable articles [of rubber], (P.), B., 113.
- Twiss, D. F., Carpenter, A. S., and Neale, A. E. T., fireproofing of rubber and its manufacture, (P.), B., 114.
- Twiss, D. F., Hadley, D. J., and Jones, F. A., vulcanisation of rubber and accelerators therefor, (P.), B., 163.
- Twiss, D. F., and Jones, F. A., articles containing gutta percha or balata, (P.), B., 162. [Accelerators for] manufacture of vulcanised rubber, (P.), B., 738.
- Uniting surfaces by means of adhesive solutions, (P.), B., 740. Vulcanisation accelerators [for rubber] and production of plastic compositions, (P.), B., 1104.
- Twiss, D. F., and Neale, A. E. T., compositions comprising organic polysulphide plastics and synthetic resins, (P.), B., 111. Plastic compositions containing organic sulphides, (P.), B., 321. Oil- and solvent-resistant [plastic] material, (P.), B., 775.
- Twiss, D. F., Wilson, J. A., and Neale, A. E. T., non-permeable [rubber] coatings, (P.), B., 562.
- Willshaw, H., and Smith, Harold, joining of articles of rubber, etc., (P.), B., 35.
- Dunmire, R. P. See Rodman, C. J.
- Dunn, C. G. See Bartlett, J. H., jun., and Brown, F. W.
- Dunn, C. L. See Noyes, A. A.
- Dunn, F. L. See Wyandt, H.
- Dunn, H. E. See Saklatwalla, B. D., and Walker, G. E.
- Dunn, J. A., origin of iron ores in Singhbhum, India, A., 1347.
- Dunn, J. T., and Bloxam, H. C. L., material for coating shredded suet, B., 652.
- Dunn, J. T., jun., and Fletcher, W. A., preparation of some diazo-thioethers of thio- β -naphthol, A., 1490.
- Dunn, L. R. L., determination of free silica in coal-measure rocks, B., 258.
- Dunn, R. H. See Cole, V. V.
- Dunn, R. W. See Salle, A. J.
- Dunn, T. E., and Bullard Co., electrochemical removal of scale and oxide from surface of stainless steel, (P.), B., 638.
- Dunnewald, T. J., solubility of soil phosphorus as affected by moistening and drying basic soils, B., 865.

- Dunnicliff, *H. B.*, and *Prakash, B.*, action of hydrogen sulphide on insoluble chromates. I. Lead chromate and silver chromate, A., 1470.
See also *Hamid, M. A.*
- Dunning, *F.* See *Macht, D. I.*
- Dunning, *J. R.*, amplifier systems for measurement of ionisation by single particles, A., 58.
and *Pegram, G. B.*, neutrons from a beryllium-radon source, A., 142. Neutron emission, A., 1440.
- Pegram, G. B.*, *Fink, G. A.*, and *Mitchell, D. P.*, interaction of neutrons with matter, A., 1186.
- Pegram, G. B.*, *Fink, G. A.*, *Mitchell, D. P.*, and *Segré, E.*, velocity of slow neutrons by mechanical velocity selector, A., 1441.
- and *Skinner, S. M.*, ionising particle counters, A., 1217.
- Dunning, *R. G.* See *Cummings, M. B.*
- Du Nöuy, *P. L.*, ring method for measuring surface tension, A., 467. Immunological reactions and viscosity, A., 1395.
- and *Hamon, V.*, pH of heat-inactivated serum, A., 230. Critical temperature of serum. IX. Ionic equilibrium as a function of temperature and pH , A., 880.
- Dunstan, *A. E.*, *Hague, E. N.*, and *Howes, D. A.*, thermal treatment of gaseous hydrocarbons, B., 934.
- Du Pan, *R. M.*, and *Ramseyer, M.*, action of plant hormones on development of frog-spawn, A., 1285.
- Duparque, *A.*, petrographic characters of the Permian coals of the Belgian Congo, A., 843.
- Duplicate Corporation. See *Haux, E. H.*, *Macht, M. L.*, *Morris, P. R.*, *Sherts, J. H.*, and *Smith, C. E.*
- Duplessis, *C. V. E.*, and *Du Pont Cellophane Co., Inc.*, sheets or films of regenerated cellulose, (P.), B., 1138.
- Du Plessis, *S. J.*, *Botrytis* rot of grapes and its control during 1933—1934, B., 822, 875. Pink root and bulb rot of onions caused by *Fusarium cepae*, *Hanz., Emend.* Link and Bailey, B., 1012.
- Dupont, *G.*, and *De Fayard, J.*, combined manufacture of cellulose pulp from wood and straw, B., 587.
- and *Dulou, R.*, pyrolysis of pinene; pyronenes, new type of monocyclic terpene, A., 1127. Presence of active *sec.*-butyl alcohol in fusel oils, B., 745.
- Rambaud, (Mme.)*, and *Bonichon*, composition of American wood turpentine, B., 1054.
- and *Zacharewicz, W.*, synthesis of nopinene and $\Delta^{1:5}$ -pinadiene from pinene, A., 624. Synthesis of myrtenol, A., 624.
- Dupont, *L. A.*, mixed carbonylsalicylic ether-anhydride of salicylocarbonic acid and homologues thereof, (P.), B., 539.
- Dupont, *Y.* See *Paget, M.*
- Dupont, *(Mlle.) Y.*, application of De Donder's thermodynamic synthesis to the *Nernst* and *Ettingshausen* transverse effects, A., 575.
- Du Pont Cellophane Co., Inc. See *Brandenberger, J. E.*, *Charch, W. H.*, *Duplessis, C. V. E.*, *Herrmann, O.*, *Ostwald, U.*, and *Voss, J.*
- *Du Pont de Nemours & Co., *E. I.*, amino-alcohols [from sugars], (P.), B., 539. [$\beta\beta'$ -Diamino]anthraquinone derivatives, (P.), B., 263. Azo-dyes and their manufacture, (P.), B., 797*. [Direct] azo-dyes, (P.), B., 94. Azo-dyes [for leather], (P.), B., 349, 717.
- Benzanthrone compounds, (P.), B., 894. Compounds of the benzanthrone series [2-methylbenzanthrone], (P.), B., 220.
- Cellulose esters, (P.), B., 97*, 266. Unsaturated esters of cellulose, (P.), B., 799. Colouring of cellulose ester and other materials, (P.), B., 946. Cellulose ethers, (P.), B., 184. Aliphatic cellulose ethers, (P.), B., 943. Cellulosic pigments, (P.), B., 562. Coating of flexible sheet materials, (P.), B., 562. Cuprous chloride, (P.), B., 629.
- Detergent compounds and their application, (P.), B., 620. Diazoimino-compounds and their application in dyeing and printing, (P.), B., 1086. Water-soluble diazoimino-compounds and their application [in "one-bath" dyeing and printing], (P.), B., 264. Dibenzanthrone and isodibenzanthrone dyes, (P.), B., 15. [α -Di]hydroxybenzenes, (P.), B., 443. [Green dis-azo-dyes, (P.), B., 15. Dyes on the fibre, (P.), B., 59. Dyes of the dibenzanthrone series, (P.), B., 1087. Dye intermediates of the anthraquinone series, (P.), B., 297. Dyeing of leather, (P.), B., 1140.
- Ethers, halogenated, (P.), B., 297. Open-chain and cyclic ethers, (P.), B., 1037. Catalytic manufacture of ethyl acetate from ethyl alcohol, (P.), B., 442. Propellant explosives, (P.), B., 575*. Explosive compositions of the character of gelatine dynamites, (P.), B., 207.
- Fluorination of organic compounds, (P.), B., 715. Electrolytic production of fluorine, (P.), B., 544. Stabilisation of aqueous formaldehyde solutions, (P.), B., 620, 716. Fuel oil, (P.), B., 713. [Combined] fungicidal and insecticidal materials, (P.), B., 473.
- Glycerol and glycols, (P.), B., 795. [Gum inhibitors for stabilised] motor fuel oils, (P.), B., 486*.
- Hydroabietyl alcohols, (P.), B., 796. Stabilisation of liquid hydrocarbons, (P.), B., 838. Purification of aqueous solutions of hydrogen peroxide, (P.), B., 1092. Hydrogenated mononuclear heterocyclic carboxylic acids and their salts, (P.), B., 1134.
- Insecticidal, fungicidal, and similar materials, (P.), B., 648. Case-hardening of iron and steel, (P.), B., 1147.
- Leather, artificial, (P.), B., 97*.
- Mercury organic compounds, (P.), B., 333. Metal-coated materials [e.g., paper or fabrics], (P.), B., 1099.
- Nitric acid and apparatus for production, (P.), B., 1092.
- Olefines, pyrolysis of, (P.), B., 893.
- Paper, safety, (P.), B., 267. [Pentakis]azo-dyes [for leather], (P.), B., 717.
- Phenols, (P.), B., 396. Polynuclear phenols, (P.), B., 841. Printing pastes for textile materials, (P.), B., 1042. [Pyranthrone] vat dyes and intermediates thereof, (P.), B., 942.
- Resins, synthetic, (P.), B., 960. [Alkyd] synthetic resins and compositions containing the same, (P.), B., 240.
- *Du Pont de Nemours & Co., *E. I.*—*contd.*
- Synthetic [glyptal] resins, (P.), B., 112. [Preparation and] applications of [oil-soluble] synthetic resins, (P.), B., 1154. Resinous products, (P.), B., 112. Resinous products [from proteins], (P.), B., 70. Synthetic resinous compositions, (P.), B., 240. Preservation of rubber, (P.), B., 600. Colouring of rubber, (P.), B., 196. Rubberised fabric, (P.), B., 303.
- Selenium compounds of the benzanthrone series, (P.), B., 1134. Superfatted soap, (P.), B., 365. Electrolytic production of sodium and other light metals, (P.), B., 909, 957. Sulphur dyes, (P.), B., 15.
- Thioindigo dyes, (P.), B., 797. Intermediates for thioindigo dyes, (P.), B., 349.
- [Vat] dyes of the anthraquinone series and their production, (P.), B., 397. Vulcanisation accelerators and their application, (P.), B., 1006.
- Waterproof and oilproof material [for wrappers or containers], (P.), B., 185. Wetting agents, etc., (P.), B., 443. Preservation of wood and similar [cellulosic] material, (P.), B., 229.
- and *Adamson, W. A.*, [purification] of nitroanthraquinonesulphonic acid, (P.), B., 443.
- Ainslie, T. D.*, and *McKeown, J.*, absorbent material; [antiseptic surgical bandage], (P.), B., 430.
- Alvarado, A. M.*, and *Parrett, A. N.*, asphaltic coating compositions and materials [e.g., rubber] coated therewith, (P.), B., 161.
- and *Arnold, H. R.*, granulation of finely-divided materials, (P.), B., 531.
- and *Arvin, J. A.*, diphenylmethanes, (P.), B., 1131.
- and *Barrett, H. J.*, cellulose derivative [coating] composition, (P.), B., 1152.
- Barrett, H. J.*, and *Dorough, G. L.*, emulsion, (P.), B., 619.
- Bateman, A. W.*, and *Thomas, R. E.*, high-glaze finish for fabrics, etc., (P.), B., 145.
- and *Beard, E. E.*, 1-nitroanthraquinone-6-carboxylic acid and carboxyl halides thereof, (P.), B., 1085.
- and *Beekley, J. S.*, effecting [steam-hydrocarbon] chemical reactions at elevated temperatures, (P.), B., 90.
- and *Benger, E. E.*, affixing stamps, (P.), B., 163.
- and *Berger, E. K. II.*, synthesis of camphor, (P.), B., 1085.
- and *Berliner, J. F. T.*, anti-freeze non-corrosive solution, (P.), B., 2.
- Bishop, O. M.*, and *Darlington, C. J.*, 1-benzoylamino-4-chloroanthraquinone, (P.), B., 349.
- Bishop, O. M.*, and *Johnson, F. W.*, textile printing, (P.), B., 1091.
- and *Bond, H. A.*, vaporisation of formamide, (P.), B., 92.
- Bond, H. A.*, and *Smith, L. B.*, oxidation of alcohols [to aldehydes], (P.), B., 620.
- Bousquet, E. W.*, and *Tisdale, W. H.*, contact insecticide, (P.), B., 168.
- and *Bradshaw, H.*, organo-metallic protective agents [for coating compositions], (P.), B., 367.
- Bridgman, P. W.*, and *Conant, J. B.*, polymerisation of unsaturated organic materials, (P.), B., 139.

- Du Pont de Nemours & Co., *E. I.*, and Brubaker, *M. M.*, [alkyd] synthetic resins, (P.), B., 278.
- Buckley, *J. R.*, and Doran, *C. A.*, esters of organic acids, (P.), B., 13.
- and Burdick, *C. L.*, fertiliser manufacture, (P.), B., 282.
- and Burke, *C. E.*, [paper] shot shells, (P.), B., 224.
- Burke, *C. E.*, and McGill, *R.*, [explosive from] nitration of quebrachitol, (P.), B., 383.
- and Burke, *J. P.*, purification of alcohols, (P.), B., 1129.
- Burke, *J. P.*, and Doran, *C. A.*, purification of esters, (P.), B., 396.
- Buxbaum, *E. C.*, and Lee, *H. R.*, amino-dihydroxyanthraquinones, (P.), B., 219.
- and Calcott, *W. S.*, corrosion inhibitor [for steel vessels in urea synthesis], (P.), B., 907.
- Calcott, *W. S.*, Carter, *A. S.*, and Downing, *F. B.*, polymerisation of unsaturated hydrocarbons [vinylacetylene derivatives], (P.), B., 297. Coating composition [from acetylene polymerides], (P.), B., 320.
- Calcott, *W. S.*, and Cheney, *C. H.*, detergent compositions [for cleaning metal surfaces], (P.), B., 1102.
- Calcott, *W. S.*, and Douglass, *W. A.*, compounding of rubber, (P.), B., 196. Inhibition of deterioration of rubber, (P.), B., 197. Preservation of oils, fats, fatty oils, fatty esters, fatty acids, fatty acid salts, and related compounds, (P.), B., 1150.
- Calcott, *W. S.*, and Downing, *F. B.*, [anti-fouling] coating composition, (P.), B., 278.
- Calcott, *W. S.*, and Foreman, *M. O.*, fungicide, (P.), B., 1159.
- Calcott, *W. S.*, Parmelee, *A. E.*, and Meschter, *H. F.*, [lead] alloy for use in manufacture of lead tetraethyl, (P.), B., 193. Lead tetraethyl, (P.), B., 349.
- Calcott, *W. S.*, Parmelee, *A. E.*, and Stecher, *J. L.*, lead tetra-alkyl, (P.), B., 1086.
- and Carlisle, *P. J.*, dewaxing of oil, (P.), B., 892.
- Carlisle, *P. J.*, and Dangelmajer, *C.*, calcium cyanide, (P.), B., 306.
- Carothers, *W. H.*, and Berchet, *G. J.*, vinyl ethinyl derivatives, (P.), B., 347. Chemical products [halogenation of hydrogen halide adducts of vinylacetylene], (P.), B., 395.
- Carothers, *W. H.*, and Collins, *A. M.*, cyclic compounds, (P.), B., 621.
- Carothers, *W. H.*, Collins, *A. M.*, and Kirby, *J. E.*, polymerised halogenated hydrocarbon, (P.), B., 618.
- Carothers, *W. H.*, Jacobson, *R. A.*, and Berchet, *G. J.*, vinyl ethinyl derivatives, (P.), B., 347. Vinyl ethinylcarbinol polymer [ide], (P.), B., 347.
- and Carpenter, *G. B.*, carboxylic acids [formic acid], (P.), B., 92. Carboxylic acids, (P.), B., 262, 939. Organic acids, (P.), B., 939.
- Clarkson, *R. G.*, and Downing, *F. B.*, *o*-dihydroxybenzenes, (P.), B., 716. [o-]Dihydroxybenzenes, (P.), B., 894. Discharge printing, (P.), B., 946.
- and Cochran, *P. B.*, nitrocellulose, (P.), B., 351.
- and Coffman, *D. D.*, halogen-containing compounds [halogenation of β -dichloro- Δ^2 -butylene], (P.), B., 395.
- Du Pont de Nemours & Co., *E. I.*, and Cole, *J. E.*, [textile-] printing [assistants], (P.), B., 627.
- and Collins, *A. M.*, chemical product [synthetic rubber], (P.), B., 644.
- and Conaway, *R. F.*, methyl vinyl ketone, (P.), B., 620.
- and Dahlen, *M. A.*, azo-dyes [ice colours], (P.), B., 941. [2,3-hydroxy] naphthoic acid derivatives [arylamides], (P.), B., 1133.
- Dahlen, *M. A.*, and Etzelmiller, *R. E.*, [hydrogenated aroylamido]arylamines, (P.), B., 1085.
- Dahlen, *M. A.*, and Foohey, *W. L.*, organic nitro-compounds [chloro-nitrobenzenes], (P.), B., 939.
- Dahlen, *M. A.*, and Zwilmeyer, *F.*, dyeing and printing of textile material, (P.), B., 670.
- and Daudt, *H. W.*, manufacture of benzoic from phthalic acid, (P.), B., 348.
- and Davis, *Clark W.*, purification of crude aromatic nitro-compounds, (P.), B., 396.
- and Dettwyler, *W.*, halogenation of aminoanthraquinones, (P.), B., 1133.
- and Douglass, *W. A.*, [collector for] concentrating ores and minerals by flotation, (P.), B., 193.
- Downing, *F. B.*, Clarkson, *R. G.*, and Hannum, *C. W.*, non-dyeing sulphurised phenol, (P.), B., 1132.
- Downing, *F. B.*, Clarkson, *R. G.*, and Wolff, *C. G.*, [gum inhibitors for] stabilised motor fuel, (P.), B., 216.
- Downing, *F. B.*, and Walker, *H. W.*, gum inhibitor for cracked hydrocarbons, (P.), B., 343.
- Draves, *C. Z.*, Lubs, *H. A.*, and Walker, *H. W.*, treatment of textile materials, (P.), B., 145.
- Dykstra, *H. B.*, and Lawson, *W. E.*, [vinyl resin] composition, (P.), B., 816.
- and Ellsworth, *D. C.*, solvents for etherification of cellulose, (P.), B., 987.
- and Ernst, *A. H.*, material for decorating [ceramic] surfaces [with metal], (P.), B., 805.
- Etienne, *A.*, and Du Chaffaut, *R.*, carrying out exothermic catalytic chemical reactions, (P.), B., 385.
- and Fassnacht, *H. H.*, gelatinised high-explosive composition, (P.), B., 383.
- and Fox, *A. L.*, reduction products of the indigoid series, (P.), B., 942. Thiazoles, (P.), B., 1134.
- and Gauerke, *C. G.*, oil paint resistant to yellowing, (P.), B., 815. Mixed synthetic oil and product derived therefrom, (P.), B., 959.
- Gent, *K. T.*, Johnson, *Norman G.*, Lewis, *H. A.*, and Woodbury, *C. A.*, [low-density] explosive compositions, (P.), B., 383.
- and Gilbert, *H. N.*, purifying light metals [sodium], (P.), B., 157.
- Gilbert, *H. N.*, and Reichert, *J. S.*, stabilisation of aqueous solutions containing hydrogen peroxide, (P.), B., 948.
- Graves, *G. De W.*, and Lawson, *W. E.*, [plasticisers for] cellulose derivative compositions, (P.), B., 735.
- and Greenwalt, *C. H.*, purification of alcoholic mixtures, (P.), B., 761.
- and Gubelmann, *I.*, flaked resorcinol, (P.), B., 894.
- Du Pont de Nemours & Co., *E. I.*, Gubelmann, *I.*, and Henke, *C. O.*, purification and hydrogenation of pyridines, (P.), B., 841.
- Gubelmann, *I.*, and Murphy, *A. R.*, azo-dyes, (P.), B., 14.
- Gubelmann, *I.*, and Oesch, *J. B.*, azo-dyes [for wool], (P.), B., 94.
- Gubelmann, *I.*, Weiland, *H. J.*, and Gottlieb, *H. B.*, anthraquinone compound, (P.), B., 716. Substituted *o*-benzoylbenzoic acids, (P.), B., 716.
- Hitch, *E. F.*, Dahlen, *M. A.*, and Friedrich, *M. E.*, fluorinated arylamides, (P.), B., 1132.
- Holmes, *F. B.*, and Dahlen, *M. A.*, water-soluble azo-dye intermediates, (P.), B., 894.
- and Holt, *D. A.*, case-hardening of alloy steels by nitrogenisation, (P.), B., 556. Case-hardening [of ferrous metals], (P.), B., 907.
- and Holt, *H. S.*, [casein] moulded products, (P.), B., 915.
- Holt, *L. C.*, and Daudt, *H. W.*, alkyl halides, (P.), B., 1085.
- and Hopkins, *H. H.*, patent leather, (P.), B., 115. Coated material [e.g., linoleum], (P.), B., 320.
- Hopkins, *H. H.*, and McDermott, *F. A.*, [modified alkyd] synthetic resin, (P.), B., 736.
- Hopkins, *H. H.*, and Richardson, *J., jun.*, paint vehicle for flaked pigments, (P.), B., 418.
- Hopkins, *H. H.*, and Stewart, *F. S.*, non-yellowing baking enamel [containing alkyd resins], (P.), B., 1056.
- and Howell, *E. T.*, [condensed] anthraquinone bodies, (P.), B., 219. Dibenzanthrone derivatives, (P.), B., 622.
- and Hunt, *J. K.*, coating composition retaining flexibility and antioxidant therefor, (P.), B., 1152.
- Iliff, *J. W.*, and Robinson, *P.*, [oil-modified alkyd] synthetic resin, (P.), B., 737. Enamel-like [alkyd-resin] coating composition, (P.), B., 1152.
- and Jacobson, *R. A.*, halogeno-vinylacetylene, (P.), B., 618.
- and Johnson, *A. J.*, stabilisation of [dye] suspensions, (P.), B., 896.
- Johnson, *Norman G.*, and Lewis, *H. A.*, explosive coating material, (P.), B., 656.
- Johnson, *Norman G.*, and Woodbury, *C. A.*, gelatine dynamite composition, (P.), B., 383.
- Jones, *D. W. O.*, and Krug, *G. C.*, multiply paper board, (P.), B., 352.
- Jordan, *Henry*, and Dahlen, *M. A.*, [mono]azo-dyes [for acetate silk], (P.), B., 397.
- and Kern, *J. G.*, [esters of] leuco-compounds of vat dyes, (P.), B., 183.
- and Kharasch, *M. S.*, organic mercury compounds, (P.), B., 1165.
- and Knowles, *F.*, *isoviolanthrone*, (P.), B., 183.
- Lacy, *B. S.*, and Bond, *H. A.*, apparatus for effecting gas reactions, (P.), B., 1027.
- and Larchar, *A. W.*, hydrogenation of aliphatic polyhydric alcohols, (P.), B., 395. Catalytic production of [n-]butyl alcohol, (P.), B., 395. Polyhydroxy-[polyhydric] alcohols, (P.), B., 395.
- and Larson, *A. T.*, hydrogen, (P.), B., 900.

- Du Pont de Nemours & Co., E. I., and Lawrie, J. W.**, acetic acid and its derivatives, (P.), B., 92.
- and Lawson, W. E.**, artificial fabric containing resins, (P.), B., 185. Coating composition, (P.), B., 418. Polymerisation of vinyl naphthalene, (P.), B., 1057.
- and Lazier, W. A.**, production of esters by catalytic dehydrogenation [of polyhydric alcohols], (P.), B., 92. Catalytic preparation of organic compounds, (P.), B., 395. Catalytic hydrogenation process, (P.), B., 395. Hydrogenation of furfuran [furan] or derivatives thereof, (P.), B., 664. Catalytic dehydrogenation of primary alcohols, (P.), B., 840. Oxygenated organic compounds, (P.), B., 1085.
- Lenher, S., and Kistiakowski, G. B.**, uncatalysed oxidation of acetylene, (P.), B., 182.
- and Levine, A. A.**, chloroform, (P.), B., 839.
- and Lewers, W. W.**, polishing composition, (P.), B., 1150.
- and Lewis, H. A.**, ignition composition [for blasting caps], (P.), B., 1024.
- and Loder, D. J.**, esters of unsaturated monocarboxylic aliphatic acids, (P.), B., 620.
- Lubs, H. A., and Cole, J. E.**, aminoarylthioglycolic acids, (P.), B., 183. 1-Thioglycol-2-amino-5-alkoxybenzene derivatives [2-amino-5-alkoxythioglycolic acids], (P.), B., 183.
- Lubs, H. A., and Walker, H. W.**, treatment of textile materials, (P.), B., 145.
- and Lulek, R. N.**, improved [salts of dihydroxy-] dibenzanthrone, (P.), B., 220.
- and Macallum, A. D.**, cyanides, (P.), B., 1043. Cyanohydrins, (P.), B., 1130.
- Marvin, C. J., and Walker, M.**, hydrocyanic acid, (P.), B., 305.
- and Mattison, E. L.**, derivatives of diphenylmethane, (P.), B., 182.
- and Melvin, W. S.**, coating composition, (P.), B., 736.
- Morrison, M. H., and Nollau, E. H.**, cellulose nitrate compositions and solvent mixtures therefor, (P.), B., 367.
- and Muckenfuss, A. M.**, alkali hydride, (P.), B., 99.
- Muckenfuss, A. M., and Hansley, V. L.**, plasticising [cellulose] esters, (P.), B., 861.
- and Murphy, A. R.**, [tris]azo-dyes, (P.), B., 397.
- Murray, H. A., jun., and Patterson, G. D.**, aqueous [cellulose derivative-oil] emulsion, (P.), B., 735.
- and Neal, A. M.**, preservation of rubber, (P.), B., 643.
- and Nebel, W.**, sanding sealer [or primer], (P.), B., 735.
- and Nollau, E. H.**, fireproof screen for projected images, (P.), B., 175.
- and Parmelee, A. E.**, purification of lead tetra-alkyl, (P.), B., 895.
- and Parrett, A. N.**, asphaltic coating composition, (P.), B., 1005.
- Patterson, G. D., and Shive, R. A.**, synthetic [alkyd] resin, (P.), B., 1153.
- and Perkins, M. A.**, benzanthranyl selenium compounds, (P.), B., 444. Anthraquinone compound[s] containing selenium], (P.), B., 763.
- Du Pont de Nemours & Co., E. I., and Powers, D. H.**, carbon disulphide reaction products, (P.), B., 840.
- and Reichert, J. S.**, stabilisation of [hydrogen] peroxide solutions, (P.), B., 673.
- Reichert, J. S., and Sparks, W. J.**, bread and other baked cereal foodstuffs, (P.), B., 972.
- and Reid, E. E.**, [plasticisers for] cellulose derivative compositions, (P.), B., 1153.
- Reid, E. E., and Schwartz, G. L.**, ester of polycarboxylic acids, (P.), B., 1132. Cellulose derivative compositions and softeners therefor, (P.), B., 1137.
- and Richardson, R. W.**, recovery of ammonia from cook liquor [from wood pulping], (P.), B., 144.
- and Salzberg, P. L.**, organo-metallic protective agent[s] for nitrocellulose coating compositions], (P.), B., 466. Resinous metal compounds, (P.), B., 961.
- Salzberg, P. L., and Meigs, F. M.**, parasiticides and mothproofing, (P.), B., 186.
- and Schulenburg, W.**, preparation of thiourea, (P.), B., 840.
- Schwartz, G. L., and Young, J. H.**, wool substitutes and spinning of short filaments of cellulose derivatives, (P.), B., 1138.
- and Scott, N. D.**, ammonium thiocyanate, (P.), B., 672.
- and Sease, V. B.**, reduction of viscosity of cellulose acetate, (P.), B., 350.
- and Stallmann, O.**, vat dyes of the dibenzanthrone series, (P.), B., 95.
- and Stanley, W. M.**, modified castor oil, (P.), B., 159.
- and Stauffer, W. O.**, crystallising varnish, (P.), B., 161.
- and Svano, H.**, dewaxing of petroleum oil, (P.), B., 983. Heat-recovery system, (P.), B., 1073.
- Tinker, J. M., and Hansen, V. A.**, sulphonation of β -naphthylamine, (P.), B., 622.
- Tinker, J. M., and Spiegler, L.**, nitration of *N*-acetyl-*p*-toluidine, (P.), B., 396. 5-Nitro-2-aminoanisole [*o*-anisidine], (P.), B., 396.
- Tisdale, W. H., and Williams, I.**, disinfectant [and fungicide], (P.), B., 784.
- and Tyler, C.**, resolution of [water-in-oil] emulsions, (P.), B., 936.
- and Vail, W. E.**, catalysts [for the methane-steam reaction], (P.), B., 724. Organic esters, (P.), B., 893.
- and Vose, R. S.**, refining of hydrocarbon oils, (P.), B., 89. Refining of liquid hydrocarbons, (P.), B., 345.
- and Werntz, J. H.**, esters [of β -hydroxybutadiene], (P.), B., 347.
- and Whelen, M. S.**, 1-amino-4-hydroxyanthraquinone, (P.), B., 219.
- and Williams, I.**, 1-mercaptoarylthiazoles, (P.), B., 762. Impregnation of porous objects [e.g., leather, wood, cloth, or tiles], (P.), B., 1076.
- Williams, I., Douglass, W. A., and Neal, A. M.**, preservation of rubber, (P.), B., 962.
- Williams, I., and Neal, A. M.**, preparation of salts of pyrocatechol borate, (P.), B., 841.
- and Woodbury, C. A.**, explosive compositions, (P.), B., 383.
- Du Pont de Nemours & Co., E. I., and Woodhouse, J. C.**, [di]methyl ether, (P.), B., 13. Hydrogen, (P.), B., 403. Catalysts [for the methane-steam reaction], (P.), B., 724. Processing of alcohols, (P.), B., 938. Organic acids, (P.), B., 939.
- and Woodward, H. E.**, [mono]azodyes [for rubber], (P.), B., 397. [Mono]azo-dyes [pigments], (P.), B., 941.
- and Wrightsman, P. G.**, explosive chargo, (P.), B., 831.
- and Wuertz, A. J.**, anthraquinone derivatives, (P.), B., 93. Halogenated benzoylaminoanthraquinone [4-chloro-1-benzamidoanthraquinone], (P.), B., 349.
- Zimmerli, A., and Lyon, R. C.**, purification of organic bodies, (P.), B., 219.
- Du Pont Rayon Co.** See **Banigan, T. F.**, **Bohnson, V. L.**, **Ellsworth, D. C.**, **Haskius, J. F.**, **Jacquet, P. J.**, **Kline, E.**, **Lardy, G.**, and **Parker, H. H.**
- Du Pont Viscoloid Co.** See **Bren, B. C.**, and **Eskeu, R. K.**
- Dupouy, G.**, constitution of paramagnetic substances; transformation points, A., 814. Properties of paramagnetic substances; interpretation of fundamental characteristics, A., 814.
- and Jacquinet, P.**, proportionality of dispersion to field in the Zeeman effect of three mercury levels, A., 1438. See also **Haenny, C.**
- Du Puis, R. N., and Lindwall, H. G.**, synthesis of 1:4-dihydrocinophens [2-phenyl-1:4-dihydroquinoline-4-carboxylic acids] from 3-phenacyloxindoles, A., 356.
- Duquenois, P.**, constitution of antimony emetics and the hydroxy-acids from which they are derived, A., 66. Auto-esterification of lactic acid, A., 1328. Rapid detection of mineral acids in vinegar by indicators, B., 921.
- Durand, J. F.**, synthesis of benzenoid hydrocarbons, A., 852.
- and Mancet, (Mlle.) M.**, preparation of hexaiodobenzene, A., 739.
- Durand & Huguenin Akt.-Ges.**, mordant dyes, (P.), B., 264. Production of dyeings and printings by means of ester-salts of leuco-vat dyes, (P.), B., 542. Printing with dyestuffs, (P.), B., 627. Mordant [azo]-dyes, (P.), B., 1086. Printing with chromium mordant dyes, (P.), B., 1140.
- Durant, H. T.** See **Cullen, W.**
- Durbin, V. S.**, galvanised malleable iron, (P.), B., 193.
- Durex Corporation**, abrasive articles [carborundum or emery paper], (P.), B., 805.
- Durio, E.**, dioximes. CVI., A., 752.
- Durjaya, A.** See **Samec, M.**
- Durnaschikina, V. V.** See **Bogdanov, S. V.**
- Duro-Ray, Ltd., and Barnes, A. M.**, silvering of glass or other similar transparent or translucent materials, (P.), B., 949.
- Durrans, T. H.**, technical aspects of industrial solvents, B., 714. Solvents and plasticisers, B., 1151.
- Durrant, P. J.**, α -, γ -, and β -phases of the system cadmium-silver, A., 439.
- Durrant, R. G.** See **Colloidal Colours, Ltd.**
- Durrer, R.** See **Baukhof, W.**
- Dusch, F.**, effect of feeding irradiated dried yeast on yield and composition of milk with special reference to its nutritional value, A., 106.

- Duschinsky, F., bands in the neighbourhood of spectral lines in the ultra-violet, A., 1443.
- Hirschlauff, E., and Pringsheim, P., ultra-violet fluorescence spectra of iodine vapour; resonance spectra, A., 800.
- and Pringsheim, P., ultra-violet fluorescence spectra of iodine vapour: McLennan bands, A., 1046.
- Dusék, J., carbon black, (P.), B., 1082.
- Dushman, S., elements of the quantum theory. I. Quantum phenomena. II. Differential equation for a wave motion. III. Problems of potential barriers. IV. The linear harmonic oscillator. V. The rigid rotator, A., 1050, 1187, 1298.
- Dusi, H. See Lvov, A.
- Duspiva, F. See Linderström-Lang, K.
- Dussen, A. A. van der, detonation of coal [dust], B., 835.
- Dusserre, C., action of liquid manure on grassland, B., 689.
- Dussourd, E. J. L., mechanical properties of "spot" welds [in steel], B., 728.
- Dustin, H., testing of steels at high temperatures, B., 26. Study of steels at raised temperatures, B., 593.
- Dustman, R. B. See Thurston, L. M.
- Dutcher, R. A., Harris, P. L., Hartzler, E. R., and Guerrant, N. B., vitamins. XIX. Assimilation of carotene and vitamin-A in presence of mineral oil, A., 261.
- See also Guerrant, N. B.
- Du Toit, M. S., and Perold, I. S., conductivity of soil suspensions as a measure of fertility, B., 282.
- Du Toit, P. J., Malan, A. I., and Groenewald, J. W., mineral metabolism. XXXI. Minimum mineral requirements of cattle. II., A., 114.
- Dutt, A. See Chopra, R. N.
- Dutt, S., putrefactive decomposition of Bengal silk cocoon, A., 1398.
- See also Agarwal, R. R., Gupta, M. P., Lal, J. B., Malaviya, B. J., Pendse, G. P., and Seshacharyulu, E. V.
- Dutt, S. C. See Sircar, A. C.
- Dutta, A. K., interpretation of absorption spectrum of silver halides, A., 562.
- Method of determining heat of dissociation from study of the long wavelength limit of the continuous absorption by gas molecules, A., 806.
- and Deb, S. C., spectroscopic investigation of structure of hydrogen halides, A., 280.
- Dutta, P. C., indigoid dyes. VIII., A., 1249.
- Duttweiler, G., and Lanz, P., preservation of foodstuffs, tobacco, and other perishable commodities, (P.), B., 782.
- Duval, C., can cobalt have a co-ordination number 8? A., 431. Coloration of cobalt salts, A., 716. [Electrolytic] method of studying complexes, A., 1088.
- Duveneck, F. B. See Webster, D. L.
- Du Vigneaud, V., Loring, H. S., and Craft, H. A., oxidation of the sulphur of acetyl and formyl derivatives of *d*- and *l*-cystine in the animal body, A., 113.
- and Patterson, W. I., preparation of the optically active isomerides of homocystine and demonstration of their configurative relationship to naturally occurring methionine, A., 737.
- See also Dyer, H. M., Loring, H. S., Patterson, W. I., Sealock, R. R., and Sifferd, R. H.
- Duwez, P., plasticity of crystals, A., 572.
- Duyvensz, F., saliva, A., 1146.
- Dverner, H. A., zinc metallurgy. I. Reduction of zinc ores by natural gas, B., 411.
- Dvorkina, K. L., determination of fat, ash, and water in raw hides, B., 241.
- Dvornikoff, M. N., and Monsanto Chem. Co., refining of maleic acid, (P.), B., 442.
- Maleic anhydride from crude maleic acid, (P.), B., 620. Polyglycol esters of phenoxy-fatty acids [plasticisers], (P.), B., 762.
- Dwight, C. H., and Kersten, H., illuminator for printing Laue photographs, A., 1340.
- Dworzak, R., and Frödinger, W., resolution of *r*-lactaldehyde, A., 608.
- See also Dittler, E.
- Dwyer, F. P., and Mellor, D. P., X-ray study of opals, A., 324. Compounds of palladium with benzylmethylglyoxime, A., 752.
- Dyas, C. S., and Grisard Labs., Inc., extraction of cardio-active principles of squill, (P.), B., 783, 1023*.
- Dyck, W. J. D. van. See Boerlage, G. D.
- Dye, J. A. See Chidsey, J. L.
- Dyer, F. J., use of rabbits in standardisation of parathyroid hormone, A., 1171.
- Dyer, H. M., and Du Vigneaud, V., physiological availability of pentocystine and homomethionine, A., 389. Availability of *d*- and *l*-homocystine for growth purposes, A., 890.
- Dyke, H. B. van. See Li, R. C., and Mukerji, B.
- Dyke, S. C., acetylsalicylic acid poisoning, A., 1412.
- Dyke, W. J. C., and King, H., constitution of neoarsphenamine, A., 100. Constitution of sulpharsphenamine. II., A., 997.
- Dykstra, H. B. See Du Pont de Nemours & Co., E. I.
- Dykstra, K. See Liggett, T. H.
- Dymek, W. See Dziewoński, K.
- Dymock, J. B. See Distillers Co.
- Dynamit-Akt.-Ges. vorm. A. Nobel & Co., porous heat- and sound-insulating substances, (P.), B., 705. Manufacture of foils of decreased brittleness from polymerisation products of vinyl chloride, (P.), B., 721. Non-inflammable fuse-cord covering, (P.), B., 832.
- Dynkin, M. See Wasilewski, L.
- Dyson, G. M. See Connolly, J. M.
- Dyson, J. C. See Carpet Trades, Ltd.
- Dyson, R. J. H. See Hodgson, H. H.
- Dyson, W. H., application of triangular co-ordinates to comparison of drying times [of oil varnishes] with composite driers, B., 161.
- Dželepov, B. S. See Alichanov, A. I.
- Dziengel, K. See Hess, K.
- Dziewoński, K., and Dragan, C., preparation of 1-alkyl- β -naphthols, A., 970.
- and Dragan, C. [with Marchovna, C.], preparation of 1-alkyl- β -naphthols, A., 744.
- and Kahl, W. [with Dymek, W.], mercuration and decarboxylation of polycarboxylic acids, A., 748.
- Kuzdrzał, S., and Mayer, J., oxidation of 2:7-diacyetylfluorene, A., 346.
- Kwiecinski, L., and Sternbach, L., 1-benzoyl- β -naphthylamine, A., 336.
- and Mayer, J., quinoline derivatives. VI., A., 357.
- and Moszew, J., syntheses and transformations of new compounds derived from 2-phenylquinoline, A., 357.
- Dziewoński, K., Moszew, J., Maksymowicz, J., and Trzęsinski, P., quinoline derivatives. V., A., 222.
- and Otto, M., 1-methylnaphthalene derivatives, A., 1116.
- and Schoen, J., reaction between diarylthiocarbamides and alicyclic ketones, A., 628.
- Dziewulski, H., arcs in air between metallic electrodes, A., 272.
- Dzirkal, V. See Longinov, V.

E.

- Eagle, H., blood-coagulation. I. Role of prothrombin and of platelets in formation of thrombin. II. Formation of fibrin from thrombin and fibrinogen. IV. Nature of clotting deficiency in haemophilia, A., 771, 1263.
- and Baumberger, J. P., blood-coagulation. III. Constancy of p_H during coagulation of fibrinogen by thrombin, A., 1262.
- Eaglesfield, P. See Distillers Co., Ltd.
- Eakin, R. M. See Burch, A. B.
- Earl, J. C., and McGregor, G. H., "Black-fellow's bread," the sclerotium of the fungus *Polyporus mylitta*, Cke. and Mass., A., 1042.
- and Mackney, A. W., action of nitrous acid on dimethylaniline. III., A., 854. Action of acetic anhydride on *N*-nitrosophenylglycine and some of its derivatives, A., 1232.
- and Parkin, H. M., fastness of certain aminoazo-dyes to washing, B., 800.
- Earl of Dudley's Round Oak Works, Ltd., and Wright, J. T., alloy steel, (P.), B., 1147.
- Earls, L. T., intensities in ^{211}Po - ^{211}Pb transitions in diatomic molecules, A., 1292.
- and Sawyer, R. A., first spark spectrum of lead: Pb II, A., 272.
- Earp-Thomas, G. H., treatment of organic waste, (P.), B., 1072.
- Eash, J. T. See Wise, E. M.
- Easley, M. K. See Depew, H. A.
- Easson, A. P. T., Harrison, J., MacSwiney, B. A., and Pyman, F. L., relation between chemical constitution and purgative action, A., 79.
- See also Boots Pure Drug Co.
- East Africa Agricultural Research Station, [report of soil chemist], B., 904.
- Easter, G. J. See Melton, R. L., and McMullen, C.
- Easthope, C. E., electromagnetic fields due to variable electric charges and intensities of spectrum lines according to quantum theory, A., 556.
- Eastlack, H. E., lacquer testing, B., 598.
- Eastman, A. S. See Goodeve, C. F.
- Eastman, E. D., occurrence and position of principal inflexion point in certain acid-base titration curves, A., 170.
- and Ruben, S., influence of thermal diffusion in equilibrium measurements, A., 301.
- Eastman, I. M., and Miller, E. G., jun., gastro-intestinal p_H in rats, A., 1005.
- Eastman, N. J., and Dippel, A. L., passage of arsenic through human placenta following arsphenamine therapy, A., 531.
- Geiling, E. M. K., and De Lander, A. M., foetal blood. IV. Oxygen and carbon dioxide dissociation curves, A., 507.

- Eastman Kodak Co., cellulose esters, (P.), B., 96.
- and Beach, N. F., moistureproofing [wrapping material], (P.), B., 1139.
- and Brooker, L. G. S., photographic emulsions containing dibenzoxacarbo-cyanines or 8-substituted oxacarbo-cyanines, (P.), B., 334.
- and Burwell, R. L., jun., two-colour subtractive photographic prints on double-coated film, (P.), B., 382.
- and Capstaff, J. G., photographic colour process, (P.), B., 126. Making a combined sound and picture record, (P.), B., 751.
- Capstaff, J. G., and Seymour, M. W., photographic images in dyed silver iodide, (P.), B., 382.
- and Carroll, S. J., cellulose organic ester composition containing a benzyl ether of diethylene glycol, (P.), B., 239.
- and Churchill, R. L., packaging method, (P.), B., 669.
- Clarke, H. T., and Malm, C. J., artificial silk, (P.), B., 668.
- and Crabtree, J. I., photographic developing solutions, (P.), B., 751.
- and Derhoef, H. E. van, sheets or films of cellulose material, (P.), B., 799.
- Dickins, A. W. M., and Fordyce, C. R., purification of methyl-*p*-aminophenol, (P.), B., 761.
- Farrow, E. S., and Carroll, S. J., cellulose acetate films, (P.), B., 141.
- and Figg, L. J., jun., [ethyl] alcohol denaturant, (P.), B., 839. Denaturant for ethyl alcohol, (P.), B., 839.
- and Fordyce, C. R., ethanalamine salt of cellulose esters containing dicarboxylic acid radicals, (P.), B., 668.
- Fordyce, C. R., and Salo, M., photographic stripping film, (P.), B., 750.
- Fuess, J. T., and Staud, C. J., acetone-soluble cellulose nitroacrylate, (P.), B., 1137.
- and Gray, H. Le B., fibrous cellulose nitro-acetate soluble in acetone, (P.), B., 351.
- and Hartman, W. H., purification [and dehydration] of *tert*-butyl alcohol, (P.), B., 138.
- and Hickman, K. C. D., lubricant containing a cellulose derivative, (P.), B., 892.
- Hickman, K. C. D., and Sanford, C. R., non-halation film backing, (P.), B., 125.
- Hickman, K. C. D., and Staib, L. A., jun., photographically sensitive element; [printing paper], (P.), B., 925.
- and Jones, L. A., sound records, (P.), B., 925.
- and Kocher, N. S., protective covering including tricresyl [tritoyl] phosphate, (P.), B., 278. Protective covering [for nitrocellulose films] including a dialkyl ester of phthalic acid, (P.), B., 278. Composition containing cellulose acetate and a treated natural resin or gum, (P.), B., 735. Lacquer, (P.), B., 736.
- and McNally, J. G., substratum for photographic elements, (P.), B., 975.
- McNally, J. G., and Beach, N. F., non-curling cellulose organic-derivative film, (P.), B., 1167.
- and Malm, C. J., highly flexible sheeting, (P.), B., 266. Cellulose esters and corresponding alkyl esters, (P.), B., 1137.
- Eastman Kodak Co., Malm, C. J., and Fisher, W. E., reclamation of mixed organic esters of cellulose, (P.), B., 351.
- Malm, C. J., and Fordyce, C. R., production of mixed esters of cellulose in an ester of a halogenated fatty acid, (P.), B., 351. Halogenated fatty acid esters of cellulose, (P.), B., 668. Plastic compositions [from cellulose esters], (P.), B., 737.
- Malm, C. J., and Nadeau, G. F., alkoxy-acetic acids, (P.), B., 1130.
- Malm, C. J., and Waring, C. E., cellulose derivatives containing phosphorus, (P.), B., 351.
- and Muehler, L. E., liquid hardener solutions [for photographic baths], (P.), B., 975.
- and Murray, A., photomechanical resists, (P.), B., 255, 479. Controlled reduction of photographic images, (P.), B., 334.
- and Murray, T. F., jun., light-filtering overcoating, (P.), B., 599, 830.
- and Northrup, D. E., manufacturing mottled moulded articles [from thermoplastic cellulosic materials], (P.), B., 816.
- and Reid, M. J., stabilisation of cellulose nitrate, (P.), B., 351. Decoloration of cellulose nitrate, (P.), B., 1140.
- and Richardson, E. E., protective overcoatings [for cellulose nitrate films], (P.), B., 278.
- Richardson, E. E., and Staud, C. J., protective overcoatings [for cellulose nitrate films], (P.), B., 278.
- and Rittman, A. C., nitrocellulose cement, (P.), B., 642.
- and Russell, H. D., photographic developer, (P.), B., 831. Acid-hardening [photographic] fixing bath, (P.), B., 925. Processing of photographic elements, (P.), B., 1070.
- and Seel, P. C., moisture-resistant fibrous material, (P.), B., 223.
- and Seymour, M. W., control of contrast with colour developers, (P.), B., 126. Production of colour[ed] photographic images by development, (P.), B., 702. Photographic material for making coloured prints, (P.), B., 1069.
- Seymour, M. W., and Burwell, E., jun., production of a plurality of coloured images in a single photographic emulsion layer, (P.), B., 831.
- Sheppard, S. E., and Dietz, H. J., [pigmentation of] wrapping paper for photographic goods, (P.), B., 185.
- Sheppard, S. E., and Vanselow, W., photographic emulsions containing fog inhibitors, (P.), B., 206.
- and Slack, A. D., ground-glass surface on film support, (P.), B., 575.
- and Smith, H. B., cellulose organic ester composition containing an alkyl ester of an aryl-substituted malonic acid, (P.), B., 367. Cellulose organic ester composition containing an ester of maleic acid, (P.), B., 642.
- and Staud, C. J., superficial coating for photographic elements, (P.), B., 125. Protective overcoating, (P.), B., 278. Photographic emulsions containing disulphides as antifoggants, (P.), B., 334.
- Staud, C. J., and Kenyon, W. O., benzyl esters of cellulose acetate phthalate, (P.), B., 1137.
- Eastman Kodak Co., Staud, C. J., and Minsk, L. M., cellulose acetate compositions containing ethylene chloride and an aminoplasteiser, (P.), B., 239.
- Staud, C. J., and Murray, T. F., jun., cellulosic composition containing cyclohexanone and *o*-tolyl *p*-toluenesulphonate, (P.), B., 110. Cellulose organic ester composition comprising a phthalic acid ester of a mono-ether of hydroquinone [quinol], (P.), B., 161.
- Staud, C. J., and Waring, C. E., preparation of cellulose nitro-acetate with nitrocellulose, (P.), B., 987.
- Staud, C. J., and Webber, C. S., cellulose derivative solvent and composition, (P.), B., 110. Cellulose acetate composition, (P.), B., 239.
- and Taylor, E. R., cellulose acetate compositions containing a mixture of isomeric cresyltoluenesulphonates, (P.), B., 239.
- Taylor, E. R., and Smith, H. B., cellulose organic ester composition containing an ester of tetrahydrofurfuryl alcohol, (P.), B., 960.
- and Wood, R. O., colouring of organic cellulose ester plastics, (P.), B., 467.
- See also Carbide & Carbon Chem. Corp.
- Easton, E. C., Lucas, F. B., and Creedy, F., high-velocity particle streams in the vacuum arc, A., 801.
- Easton, R. W., production of activated carbon from powdered coal, peat, and similar carbonaceous materials, (P.), B., 582.
- Eastwood, E., and Snow, C. P., electronic spectra of polyatomic molecules. I. Saturated aldehydes. II. Acraldehyde, A., 914.
- See also Snow, C. P.
- Eastwood, R. A. See Imperial Chem. Industries.
- Eaton, B. G., relative probabilities of ionisation of *K* and *L* electrons of equal ionisation energy, A., 1293.
- Eaton, B. J., brass-wire gauze for straining [rubber] latex, B., 1057.
- Eaton, E. D. See King, C. J.
- Eaton, F. M., and Blair, G. J., accumulation of boron by reciprocally grafted plants, A., 1548.
- and Sokoloff, V. P., absorbed sodium in soils as affected by the soil-water ratio, B., 1108.
- Eaton, W. W., segregation of polonium in a bismuth crystal, A., 1440.
- See also Pollard, E.
- Ebbets, G. D., and Babcock & Wilcox, Ltd., mercury boiler, (P.), B., 1121.
- Ebbrecht, E., filtration methods in the rayon industry, B., 718.
- Ebeling, R. See Heller, G.
- Ebeling, W. See Quayle, H. J.
- Ebeling, W. W., absorption of glucose from the colon, A., 892.
- Eberhardt, O., and Riebeck'sche Montanwerke A.-G., raising the m.p. of montan wax, (P.), B., 538.
- Eberhardt, R. See Reichstein, T.
- Eberlein, J. B. See Bleibtreu, H.
- Ebers, E. S. See Bent, H. E.
- Ebert, A. See Jander, G.
- Ebert, E. See Fingerling, G.

- Ebert, *H.*, pressures of 5000 kg. per sq. cm. I. Fundamental determination of the effective cross-section of the pressure balance. II. Absolute determination of compressibility of solid substances, *A.*, 816, 840.
- Ebert, *Josef*. See Weiss, *R.*
- Ebert, *Joseph*, and Farastan Co., [preparation of] disazo-compounds for therapeutic use, (P.), *B.*, 895.
- Ebert, *M. S.*, catalytic decomposition of acetaldehyde, *A.*, 711.
- Eble, *K.*, and Pfeiffer, *H.*, dithizone [diphenylthiocarbazon] test for detecting flash-pasteurised milk, *B.*, 43. Examination of eggs, *B.*, 825.
- Ebright, *H. E.*, McIntyre, *G. H.*, and Irwin, *J. T.*, furnace atmospheres and temperature gradients and their effect on porcelain enamelling, *B.*, 1093.
- Eccles, *J. C.*, and Thompson, *J. H. C.*, visco-elastic properties of rubber, *B.*, 321.
- Echard, *R.* See Taboury, *M. F.*
- Echberg, *A. F.*, diatomaceous earth products, (P.), *B.*, 497.
- Mason, *B. W.*, and Strain, *L. H.*, coal bricks and similar fuel products, (P.), *B.*, 757.
- Echenique, *L.*, distribution of normal phosphorus in Uruguay cattle, *A.*, 642.
- Ecchevin, *R.*, absorbing power of soils in relation to magnesium chloride, *B.*, 565.
- Eck, *H.* See Schöberl, *A.*
- Eck, *J. C.*, and Marvel, *C. S.*, synthesis of bis-2:2'-(1:3-diphenylinden-3-ol); rubrene problem, *A.*, 1492.
- Eck, *M.*, and Desbordes, *J.*, cholesterolytic power of serum in a study of metabolism of cholesterol, *A.*, 103. Cholesterol content and cholesterolytic power of serum of the aged, *A.*, 103. Relation between cholesterolytic power of a serum and its protein content, *A.*, 103. Influence of hepatic stimulation on exogenous and endogenous hypercholesterolaemia in the rabbit, *A.*, 244. Influence of age on variations in cholesterol content and cholesterolytic power of blood, *A.*, 642. Experimental hepatonephritis in rabbits. I. Modification of the formation of urea by uranium nitrate. II. Comparative values of blood-urea and -indoxyl. III. Comparative determination of the retention of nitrogen by blood and tissues in the rabbit, *A.*, 895.
- Eckardt, determination of properties of blends of wheat-flour streams, uniform ash content being provided for, *B.*, 377.
- Eckardt, *A.*, life period of activated magnesium, *A.*, 1049.
- Gebauer, *R.*, and Trautenberg, *H. R.*, soft γ -radiation produced on disintegration of lithium by protons, *A.*, 910.
- Eckardt, *W.* (Iserlohn), prevention of pore formation in galvanic nickel precipitates, *B.*, 595.
- Eckardt, *W.* (Jena). See Brintzinger, *H.*
- Eckart, *C.*, rotating axes and polyatomic molecules, *A.*, 685.
- Eckart, *O.*, activation of crude fuller's earth, *B.*, 132.
- Ecke, *A.*, Gillet sizing process [for paper], *B.*, 447.
- See also Ehrenthal, *P. von*.
- Eckert, application of compressed gas as fuel for motor vehicles, *B.*, 835.
- Eckert, *A.*, taste and odour removal [from water] at Saginaw, Mich., *B.*, 127.
- Eckert, *C. T.* See Elman, *R.*
- Eckert, *F.*, toughening or hardening of glass, (P.), *B.*, 804.
- Eckert, *G.*, welding of aluminium vessels for transport and storage of nitric acid, *B.*, 501. Corrosion-resistance of silumin, *B.*, 637.
- Eckert, *J. E.*, and Allinger, *H. W.*, aeroplane dusting in relation to bee-keeping, *B.*, 969.
- Economy Fuse & Manufacturing Co. See Cherry, *O. A.*, Dearing, *M. C.*, Herbst, *C. A.*, and Kurath, *F.*
- Eddins, *A. H.*, soil treatment with sulphur and limestone for controlling bacterial wilt of potatoes, *B.*, 568. Effect of inoculated sulphur, lime, and mercury compounds on yield of potatoes, *B.*, 689.
- Eddison, *C.* See Marconi's Wireless Telegraph Co.
- Eddleman, *V. C.*, and Spradlin, *J. Q.*, flexible, non-deteriorative insulation and its application, (P.), *B.*, 735.
- Eddy, *C. E.* See Pugsley, *A. T.*
- Eddy, *C. O.*, soya-bean meal emulsifies [insecticidal] mineral oils, *B.*, 1158. New spreader for nicotine [insecticide], *B.*, 969.
- Eddy, *H. C.*, Kiech, *C. F.*, and Petroleum Rectifying Co. of California, [electric] dehydrator having emulsion guiding surface, (P.), *B.*, 415.
- Eddy, *N. B.*, [pharmacology of] phenanthrene derivatives. III. Disubstitution products, *A.*, 117.
- and Howes, *H. A.*, [pharmacology of] morphine, codeine, and their derivatives. VIII. Monoacetyl- and diacetyl-morphine and their hydrogenated derivatives, *A.*, 780.
- and Reid, *J. G.*, [pharmacology of] morphine, codeine, and their derivatives. VII. Dihydromorphine (paramorphan), dihydromorphinone (dilaudid), and dihydrocodeinone (dicodeide), *A.*, 245.
- Edel, *E.* See Fürth, *O.*
- Edel, *K.*, eczema and p_{H} in blood-plasma, *A.*, 886.
- Edel, *F.* See Mouriquand, *G.*
- Edelblute, *H. W.* See Cone, *W. H.*
- Edeleanu, *G. m. b. H.*, removal of solvents from oils and other organic liquids, (P.), *B.*, 538. Purification of hydrocarbon mixtures with removal of paraffin wax, (P.), *B.*, 838.
- Eden, *A.* See Woodman, *H. E.*
- Eden, *T.*, first pruning cycle of the Tea Research Institute [Ceylon]: fertiliser trials, *B.*, 245. Yield of tea. III. Potash and nitrogen in relation to the pruning cycle, *B.*, 778.
- Edenholm, *H.*, and Widell, *T.*, catalytic action of soda in reduction of carbon dioxide with charcoal, *A.*, 44.
- Edgar, *C. E.* See Chick, *H.*
- Edgar, *J.* See Whiteside, *A. G. O.*
- Edgar, *R.* See Ess, *M. W. van*.
- Edgars, *N. K.*, blueberry in diabetes, *A.*, 516.
- Edge, *J. W.* See Liverpool Electric Cable Co.
- Edge, *M. T.* See Drew, *W.*
- Edge, *S. R. II.*, relation of fibrillation to increase in strength on beating [wood pulp], *B.*, 399. Laboratory investigation of pitch problems [in paper mills], *B.*, 447.
- Edgerton, *H. A.*, X-ray film: its manufacture and some properties, *B.*, 1069.
- Edgington, *G.* See Robinson, *W. O.*
- Edholm, *H.* See Aktieb. Svenska Fläktfabriken.
- Ediger, *V. G.* See Daniltschenko, *P. T.*
- Edisbury, *J. R.*, Morton, *R. A.*, and Lovern, *J. A.*, absorption spectra of acids from fish-liver oils, *A.*, 647.
- See also Morgan, *R. S.*
- Edlbacher, *S.*, and Neber, *M.*, lipase activity of mammalian organs in the healthy and carcinomatous organism, *A.*, 1025.
- Edlfsen, *N. E.* See Bodman, *G. B.*
- Edlén, *B.*, wave-lengths and terms of fluorine spectrum, *F IV.*, *A.*, 1. Ionisation potential of Be III, *A.*, 136. Spectra *F III*, *F II*, and *F I*, *A.*, 423. Analysis of the atomic spectrum of oxygen, *A.*, 555. Wave-length table for the vacuum spark spectrum of fluorine, *A.*, 675.
- Edlin, *C. H.*, projection instrument for analysis of spectrographic plates, *A.*, 57.
- Edlund, *K. R.* See Shell Development Co.
- Edmed, *F. G.*, Newington, *F. H.*, and Frederick, *R. C.*, spontaneous oxidation of coal and other organic substances, *B.*, 85.
- Edmonds, *J. B.*, treatment of red squill for use as a rodent exterminator, (P.), *B.*, 528.
- Edmonds, *S. M.* See Curtman, *L. J.*
- Edmonds, *W. J.*, and Commercial Solvents Corp., catalytic apparatus, (P.), *B.*, 833.
- See also Standard-I.G. Co.
- Edmondson, *C. S.*, clay composition and articles made therefrom, (P.), *B.*, 631.
- Edmondson, *J. H.*, and Lumb, *C.*, secondary [sewage]-sludge problem, *B.*, 48.
- Edmunds, *I. G.* See Owen, *E. A.*
- Edquist, *V. T.*, recovery of gold and silver from ores and metallurgical products, (P.), *B.*, 556.
- Edsall, *J. T.*, apparent molal heat capacities of amino-acids and other organic compounds, *A.*, 1204.
- and Wyman, *J., jun.*, physical chemistry of betaines and related substances. I. Dielectric constants and apparent molal volume, *A.*, 1447.
- See also Cohn, *E. J.*
- Edson, *E. R.*, and Russia Cement Co., manufacture of a cold-water-soluble adhesive [from starch], (P.), *B.*, 645.
- Edson, *N. L.*, ketogenesis-antiketogenesis. I. Influence of ammonium chloride on ketone formation in liver. II. Ketogenesis from amino-acids, *A.*, 1274, 1531.
- Edwards, *A. J.*, Bell, *R. P.*, and Wolfenden, *J. H.*, deuterium content of naturally occurring water, *A.*, 841.
- Edwards, *B. G.*, and Everett, *M. R.*, exogenous melittaria in man, *A.*, 240.
- Edwards, *C. A.*, Higgins, *R.*, Alexander, *M.*, and Davies, *D. G.*, heterogeneity of steel ingots. XI. Influence of casting temperature on the position of blowholes in steel ingots of varying oxygen and carbon content, *B.*, 994.
- Edwards, *D. V.*, Smith, *E. K.*, and Electrons, Inc., [emission] cathode, (P.), *B.*, 1053.
- Edwards, *E. E.*, control of the cabbage root fly, *B.*, 516.
- Edwards, *E. S.*, and Panelyte Corp., odourless phenol-formaldehyde resin, (P.), *B.*, 736.
- Edwards, *F. W.* See Chinoy, *J. J.*
- Edwards, *G. P.*, activated [sewage] sludge theory, *B.*, 431.

- Edwards, H., pickling of mild steel sheets. II., B., 457.
- Edwards, H. I. See Clark, R. H.
- Edwards, H. T., and Dill, D. B., properties of reptilian blood. II. The gila monster (*Heloderma suspectum*, Copo), A., 999.
- Margaria, R., and Dill, D. B., metabolic rate, blood-sugar, and utilisation of carbohydrate, A., 110.
- See also Dill, D. B., and Margaria, R.
- Edwards, H. W., high-speed oil-diffusion pump, A., 840.
- Edwards, J., and Maass, O., density and adsorption studies in the region of the critical temperature: system dimethyl ether-alumina, A., 696.
- Sorption of dimethyl ether on alumina, A., 1457.
- See also Boomer, E. H.
- Edwards, J. D., and Wray, R. I., accelerated tests of paint finishes on aluminium, B., 277. Painting aluminium and its alloys, B., 1151.
- See also Aluminum Co. of America.
- Edwards, K. B., and Lacey, R., separation of paraffins and petroleum products from other oils by means of ethylene glycol monoacetate, B., 836.
- Edwards, M. W. See Perkins, G. W.
- Edwards, O. F. See Mallmann, W. L.
- Edwards, R. S., free water and vegetable-tanned sole leather. I., B., 644.
- Edwards, Robert Seaver, and Rumford Chem. Works, gypsum cement, (P.), B., 727.
- Edwards, V. P. See Heritage, C. C.
- Beckhout, J., critical investigation of the absorption spectrum of potassium nitrate in the ultra-violet by the spectrographic and photo-electric method, A., 680.
- See also Wygaerts, M.
- Egriwe, E. E., reactions and reagents for detection of organic compounds. III., A., 369.
- Ekelens, M. van, ascorbic acid and thio-sulphate in urine, A., 262. Vitamin-C and thiosulphate in the urine, A., 1176.
- Determination of ascorbic acid by titration, A., 1176.
- and Emmerie, A., determination of carotene and vitamin-A in blood-serum by the alkali-digestion method, A., 1427.
- Emmerie, A., and Wolff, L. K., determination of vitamin-C in blood, A., 547. "Lovibond unit" of vitamin-A, A., 1428.
- Efendi, P. G., Giršavičius, J. O., and Rzhova, A. P., production and properties of dry glyoxalase, A., 1026.
- Efendi, P. H., relative actions of pancreatin on caseinogen and gelatin, A., 252.
- See also Giršavičius, J. O.
- Effendi, N. H. See Qureshi, M.
- Efremov, V. P. See Tzuibasov, V. P.
- Egami, F. See Aubel, E., and Soda, T.
- Egan, A. L. See Ewing, S. E. T.
- Egan, J. J., and Electro Metallurg. Co., case-hardening [of ferrous articles], (P.), B., 637.
- Ege, R., and Obel, J., activation of the proteolytic enzymogen system of the ventricle, A., 1538.
- Egerton, A., and Ubbelohde, A. R., spectra and latent energy in flame gases, A., 138. Critical phenomena in the oxidation and self-inflammation of hydrocarbons, A., 937.
- Egerton, A. See also Coleman, Frank F., and Ubbelohde, A. R.
- Egerton, A. C. See Milford, M.
- Edge, W. S. See Bonney, R. D.
- Egger, W. P. See Zorn, W. M.
- Eggers, H. See Weibke, F.
- Eggert, G. B., and Baker Perkins Co., Inc., mixer, (P.), B., 787.
- Eggert, J., colour sensitometry, B., 574.
- New applications of infra-red photography, B., 702. Significance of physical chemistry in the photographic industry, B., 1023.
- See also Biltz, M.
- Eggleton, W. G. E., assimilation of inorganic nitrogenous salts, including sodium nitrite, by the grass plant, A., 1037.
- Eggs, F., and Vanoli, G., determination of creatine and creatinine, A., 1390.
- Egli, H. See Schwarzenbach, G.
- Egloff, G., and Berkman, (Miss) S., superheating and foaming phenomena in dehydrating emulsified oils, B., 483.
- Morrell, J. C., Benedict, W. L., and Wirth, C., colour-stability of gasolines; effect of mercaptans, alkyl disulphides, and sulphur, B., 535.
- and Nelson, E. F., cracking of Rumanian [petroleum] oils, B., 438. Cracking three different oils in a Dubbs cracking unit in a continuous process, B., 613.
- and Wilson, E., thermal reactions of gaseous hydrocarbons; paraffins, olefines, acetylenes, and cyclo-paraffins, A., 1206.
- See also Dryer, C. G., Ipatiev, V. N., Lowry, G. D., jun., Tropsh, H., and Universal Oil Products Co.
- Egorkin, N., basicity of fibre and shrinkage of leather on the hair side, B., 469.
- Egorov, A. N., influence of fineness of grinding of mixes on properties of high-tension porcelain, B., 453.
- Egorov, K. E. See Danilov, V. I.
- Egremont, S., dyeing and finishing plush and velvet, B., 989.
- Egyesült Izzólampá és Villamossági Részvénytársaság. See Theisz, E.
- Ehlers, C., nitric acid in used motor oils, B., 484.
- Ehrenberg, P., silo-fermentation process [for farmyard manure], B., 515. Increased protein-fodder production on the farm and the demand on the water supply of soils, B., 522. Weed seeds in stall manure, B., 741.
- Müller, B., Dietrichs, F., and Hötzel, K., replacement of oil-cake protein by ammonium bicarbonate in cow's rations, B., 78.
- Ehrenberg, W., atom scattering factor of beryllium, A., 16.
- and Shan, H. C., absorption of slow neutrons, A., 910.
- and Wulff, P., electrical conductivity and chemical equilibrium of the electrolyte in gelatin solutions containing sodium, silver, and chlorine ions, A., 825.
- See also Wulff, P.
- Ehrenfeld, J. See Hönel, H.
- Ehrenfeld, M. See Florentin, P.
- Ehrenfest, P. See Auger, P.
- Ehrenfest-Afanassjeva, T., and De Haas-Lorentz, G. L., intensity parameter and stable thermodynamic equilibrium, A., 1076.
- Ehrenstein, M., [simplification of Pictet's synthesis of nicotine], A., 1256.
- Ehrenthal, P. von, and Eecke, A., technical chemical problems in the paper industry, B., 943.
- Ehrhardt, K., and Kühn, K., biological action of the female sex hormone, A., 413.
- Ehrismann, O., respiration of acetone bacteria and bacterial autolysis, A., 407.
- Respiration of acetone bacteria and bacterial autolysates, A., 1541.
- Ehrke, G., "iron-stain" disease of potatoes, A., 1043.
- Ehrlich, J., occurrence in United States of *Cryptococcus fagi* (Baer), Dougl., B., 568.
- Ehrlichman, E. See Vogelaar, J. P. M.
- Ehrmann, K. See Trautz, M.
- Ehrmann, W. See Hecht, F.
- Ehrström, M. C., clinical significance of determinations of total serum-calcium, A., 887.
- Eibner, A., Herrmann, W. O., Haehnel, W., Miller, Martin, and Consort. für Elektrochem. Ind., G.m.b.H., composition of oils and highly polymerised compounds, (P.), B., 194.
- Eichel, H. See Freudenberg, K.
- Eichelberger, F., and Kalumite Co., increasing strength of salt solutions, (P.), B., 673.
- Eichelmann, F. J., and Carbo-Oxygen Co., apparatus for producing oxygen from liquid air, (P.), B., 767.
- Eichenberger, E. See Ruzicka, L.
- Eiehart, E., stone-wood masses for floor-covering, (P.), B., 632.
- Eichholtz, F., and Baumgart, K., poisoning of glycolytic processes, A., 775.
- and Kauderer, W., deposition of magnesium compounds in tumours, A., 649.
- and Unrath, H., catalytic action of iron. III. Oral administration, A., 781.
- Eichhorn, A., and Franquet, R., Feulgen's nuclear reaction, A., 269.
- Eichinger, A. See Ros, M.
- Eichinger, J. W., jun. See Hixon, R. M.
- Eichler, H., detection of chlorine and bromine in air, gas mixtures, and solutions by formation of iris-blue, A., 183.
- Detection of hyposulphites and sulphoxylates and of nascent hydrogen with resazurin, A., 184.
- Detection of diazonium salts and of primary amines with resorufin, A., 228.
- Detection of nitrites with Magdala-red and detection of benzene by formation of resorufin, A., 463.
- Eichler, O., fluorescence-microscopical study of lignification and of lignin, B., 299.
- Eichman, R. K., Schemjakin, M. M., and Voshdaeva, V. N., formation of phenol by fusion of sodium benzenesulphonate with sodium hydroxide. I. and II., B., 91, 137.
- Eichmann, F., and Nerad, H., transparent films, foils, or skins, (P.), B., 266.
- Eiehner, C. See Lombard, V.
- Eidelman, M. M., and Butom, M. L., influence of technological processes in preparation of sour cabbages on preservation of vitamin-C. II. Reversible oxidation of vitamin-C in cut cabbages, B., 921.
- and Poverenna, E. I., influence of technological processes in preparation of sour cabbages on preservation of vitamin-C. I. Distribution of vitamin-C in the cabbage head, B., 921.
- Eidinoff, M. L., and Aston, J. G., rotational entropy of non-rigid polyatomic molecules, A., 1064.
- Eidman, S. A. See Kashevnik, L. D.

- Eidt, C. C., fundamental effects of dates of picking [apples], B., 246. Apple storage at Kentville experimental station, B., 246.
- Eidus, J. T. See Balandin, A. A.
- Eijk, M. van, influence of sodium chloride content in the nutrient medium on development of *Salicornia herbacea* and on composition of cell salts of these plants, A., 132.
- Eilender, W., scaling and surface decarburisation of steels under influence of various gases, B., 230.
- Cornelius, H., and Knüppel, H., influence of nitrogen and oxygen on mechanical ageing of steel, B., 728.
- and Meyer, O., nitrogen content of [ferrous] slags, B., 548.
- See also Esser, H.
- Eilers, H. See Staudinger, H.
- Eimer, E. J., and Gagnier Fibre Products Co., waterproof fibre board, (P.), B., 97.
- Eimont, I. M., and Sirkin, I. A., solubility of cellulose nitrate in alcohol-ether-acetone mixtures, B., 718.
- Einecke, E., colloidal gallium, A., 444.
- Eirich, F., new type of tungsten oxide sol and its electrochemical behaviour, A., 296.
- Eisenbrand, J., and Sievert, G., [luminescence of pharmaceutical zinc oxide], A., 123.
- Eisenhut, O. See I. G. Farbenind.
- Eisenkolb, F., weathering tests with soft-steel plates, B., 359.
- Eisenlohr, F., and Hass, W., *cis*-cinnamic acids, A., 916.
- Eisenmann, (Mrs.) J. Z. K., electric birefringence of isotropic *p*-azoxyanisole, A., 568.
- Eisenmann, K. See Pungs, W.
- Eisenmenger, W. S., relative flocculation value of alcohols towards protein solutions, A., 164. Forms of nitrogen in infusions of maize, timothy, red clover, tobacco, and red top, A., 265. Toxicity of aluminium to seedlings: action of certain ions in eliminating the toxic effects, A., 797.
- Eisler, M., and Howard, A., formation of the Forssman antigen by a strain of *B. dysenteriae*, Shiga, in different nutrients, A., 1030.
- and Jacobsohn, I., antagonistic action of sterile broth extract of *B. prodigiosus*, A., 1030.
- Eisner, A., and Wagner, E. C., stability of aqueous solutions of boric acid used in the Kjeldahl method, A., 53.
- Eisner, H. See Halban, H. von.
- Eisner, P. See Ostendorf, P.
- Eisner, W. M. See Lutz, R. E.
- Eistert, B., formation and decomposition of diazo-ketones and of the so-called diazo-anhydrides from the viewpoint of the electronic theory, A., 333.
- See also Arndt, F., and Krzikalla, H.
- Eitel, H., and Loeser, A., inhibition of thyroid activity by animal blood, A., 1171. Significance of thyroid gland in antithyrotropic-protective action of the blood, A., 1543. Strengthening of the anti-thyroid protective power of blood by the thyrotropic hormone of the pituitary, A., 1544.
- See also Müller, Reinhard.
- Ekeley, J. B., and Johnson, W. W., indium salts of organic acids, A., 730.
- Ekeley, J. B., and Ronzio, A. R., action of aromatic aldehydes on the additive products obtained from aromatic amidines and glyoxal, A., 1133.
- Tieszen, D. V., and Ronzio, A. R., amidine hydrochlorides, A., 487.
- Eklund, K. I. A., light[-weight] concrete, (P.), B., 1144.
- Eklund, W. N., and Pratt, J. H., drying low-grade sugar at higher speeds at Waialua, B., 693.
- Eksteen, L. L. See Reynecke, J.
- Ekstein, H. See Boas, W.
- "Elaet" Gesellschaft für elektrische Apparate Ges.m.b.H., and Karpeles, O., conservation of fats, oils, or fatty substances, (P.), B., 109.
- Elbe, G. von. See Lewis, B.
- Elbel, E., Seiter, F., and Bakelite Ges.m.b.H., rapidly drying coatings, (P.), B., 367.
- Sussenguth, O., and Bakelite Ges.m.b.H., preparation, grinding, or polishing of tools, (P.), B., 557.
- Elchardus, E., and Laffitte, P., constitution of magnesium-zinc-silicon alloys rich in magnesium, A., 926.
- Elden, C. A., oestrin and progesterin content of the corpus luteum of the sow, A., 791.
- Elder, F. C., and Amer. Steel & Wire Co. of New Jersey, [lubricant for] wire drawing, (P.), B., 909.
- Elder, J. A. See Polhamus, L. G.
- Elder, J. H. See Allen, E.
- Elder, S., comparison of three Scottish magmas, A., 955.
- Elderfield, R. C., cymarose, A., 848, 1485.
- See also Jacobs, W. A.
- Eldin, H. See Constable, F. H.
- Eldred, F. R., and Reed & Carnrick, glandular hormone in aqueous solution, (P.), B., 924. Testicular hormone, (P.), B., 924. Ovarian hormone, (P.), B., 924.
- Eldridge, C. H., and United Chromium, Inc., apparatus for electrodeposition of chromium, (P.), B., 730.
- See also Fink, C. G.
- Eldridge, E. F., thickness of Gooch crucible mats, B., 1121. Phenolic wastes. I, B., 1168. Ignition temperature for sewage and sewage-sludge solids, B., 1168. Cyanide waste treatment at the Chevrolet Motor Co., Flint (Mich.), B., 1168. Treatment of wastes from meat-packing plants, B., 1168.
- and Damoose, N. G., sewage coagulation at Grand Rapids (Mich.). II, B., 1168.
- Mallmann, W. L., and Robinson, G. H., utilisation of carbohydrate and proteins by activated-sludge organisms, B., 1168.
- Electric Furnace Co., heat treatment of metals, (P.), B., 107.
- See also Cope, F. T.
- Electric Resistance Furnace Co., Ltd., and Robiette, A. G., [bright] annealing of metals, (P.), B., 503.
- Electric Smelting & Aluminium Co. See Cowles, E., Folger, R. C., Howells, L. T., and Scheidt, A. W.
- Electric Storage Battery Co. See Smith, Edward W.
- Electrical Co. Ltd., D. & B., O'Hea, J., and Pearson, R. E., electrical storage batteries, (P.), B., 773.
- Electrical Research Products, Inc., and Ingmanson, J. H., treatment of rubber, (P.), B., 663.
- Electrical Research Products, Inc., Ingmanson, J. H., and Mueller, G. S., separating constituents of gutta-percha resins, (P.), B., 467.
- and Kemp, A. R., partly depolymerised rubber, (P.), B., 776.
- Electro Metallurgical Co., and Becket, F. M., zirconium[-silicon] alloys, (P.), B., 557. [Ferrosilicon]-niobium alloys, (P.), B., 1147.
- Becket, F. M., and Franks, R., iron-chromium alloys, (P.), B., 155*.
- Welded joints in steels containing chromium and titanium, (P.), B., 1098.
- and Good, R. C., malleable iron castings, (P.), B., 956.
- See also Egan, J. J., and Kinzel, A. B.
- Electroblacks, Inc., carbon black, (P.), B., 180.
- See also Jakosky, J. J.
- Electroly Co., Inc. See Bremer, E. W.
- Electrolux, Ltd., and Platen-Munters Refrigerating System, production of cold, (P.), B., 657.
- Electrons, Inc. See Edwards, D. V.
- Elektrische Glühlampenfabriken, J. Kremenezky, Akt.-Ges., lustrous carbon resistances, (P.), B., 29.
- Elektrizitäts-Akt.-Ges. Hydrawerk, electrolytic condensers [made of aluminium foil], (P.), B., 639.
- Elektrochemische Ges.m.b.H. See Bäumert, P. A. F.
- Elema, B., theory of semiquinone formation and its application, A., 308.
- Elenbaas, W., temperature change of the mercury arc by addition of cadmium, A., 272.
- Elfvig, T. M., and Wallenberg, V. H., combustion of liquid fuel, (P.), B., 441.
- El Glykol Waterproofing & Construction Corporation. See Kuckro, W.
- Elias, A., microchemical colorimetric determination of sodium, A., 1215.
- Elias, H., Kaunitz, H., and Laub, R., residual nitrogen and its fractions in the liver in experimental diabetes, A., 382.
- and Zemplén, B., changes in intermediary protein metabolism in the liver in experimental diabetes, A., 515.
- Elias, H. F. See McIntyre, A. R.
- Eliashberg, M. G., preparation of bleaching solutions from chloride of lime, B., 99.
- and Martuinov, M. F., chemistry of sulphite [pulp] cooking, B., 446.
- Eliashvitsch, M., wave equation for a triatomic molecule, A., 1305.
- Eliseev, P. F. See Tscherniachovski, J. M.
- Elkenbard, A. T. See Poljakov, M. V.
- Elkin, H. A., boiling of dry-spun flax yarns, B., 843.
- Elkins, H. B., and Kuhn, W., circular dichroism of optically active β -octyl nitrite in the vapour state, A., 431.
- Ellburg, J. See Lundin, H.
- Elledge, H. G., Hirsch, A., and Diamond Alkali Co., available-chlorine compositions, (P.), B., 1043.
- Ellerbeck, W. L. See Karrick, L. C.
- Ellerman's Arracan Rice & Trading Co. See Peake, H. E. J.
- Ellinger, G. A., and Sanford, R. L., prolonged tempering at 100° and ageing at room temperature of 0.8% carbon steel, B., 26.
- Ellingham, H. J. T., industrial applications of electrolysis, B., 1052.
- See also Monk, R. G.

- Elliot, A. H. See Bischoff, F.
- Elliot, R., vinyl acetate resins, B., 319.
- Elliott, A., β bands of boron monoxide, A., 1299.
- and Cameron, W. H. B., intensity measurements in first positive bands of nitrogen, A., 1.
- Elliott, A. M., effects of organic acids and protein derivatives on growth of *Colpidium*, A., 1539.
- Elliott, C. R., removal of fumes in varnish-making, B., 109.
- Elliott, K. A. C., mechanism of respiration, A., 777.
- and Baker, Z., effects of oxidation-reduction potential indicator dyes on metabolism of tumour and normal tissues, A., 1401. Respiratory quotients of normal and tumour tissue, A., 1529.
- Benoy, M. P., and Baker, Z., metabolism of lactic and pyruvic acids in normal and tumour tissues. II. Rat kidney and transplantable tumours, A., 1273.
- Elliott, M. See Toennies, G.
- Elliott, N. G., cleaning of slow sand filters, (P.), B., 930.
- Elliott, P. H., White, W. E., and Chem. Manufg. Co., heat-exchange medium, (P.), B., 882.
- Elliott, R. D., and Johns-Manville Corp., filtration process and apparatus, (P.), B., 787.
- Elliott, R. H. E. See Barcroft, J.
- Elliott, R. L. See Hodgson, H. H.
- Elliott, S., chloramine treatment of water, B., 256.
- Ellis, C., and Chadeloid Chem. Co., equilibrated paint and varnish remover containing petroleum hydrocarbons, (P.), B., 960.
- and Ellis-Foster Co., resin, gum, and balsam, (P.), B., 112. [Alkyd] resinous products or compositions including lacquers, paints, varnishes, and other coating compositions, (P.), B., 278. Sulphide plastic, (P.), B., 368. [Alkyd-phenolic] resinous and balsamic complexes, (P.), B., 467. Oxidised motor fuel, (P.), B., 713. Preparation of [alkyd] resin and balsam with the aid of an inorganic body, (P.), B., 736. Resinous composition from phenol and acetaldehyde, (P.), B., 737. Self-compensated motor fuel, (P.), B., 838. Xylenitic resin, (P.), B., 1005. Nitrocellulose coating composition, (P.), B., 1152.
- See also Standard-I. G. Co., and Standard Oil Development Co.
- Ellis, C. D., induced radioactivity, A., 803.
- and Henderson, W. J., period of radio-nitrogen, A., 559.
- Ellis, E. L., sensitive a.c. vacuum-tube relay, A., 1097.
- See also Huffman, H. M.
- Ellis, G. H. See Brit. Celanese.
- Ellis, J. H., zonation for fertiliser requirements in the northern prairies, B., 325.
- Ellis, J. W., and Kneser, H. O., electronic and vibrational absorption in O_4 and O_2 molecules, A., 1437.
- Ellis, L. See Challenger, F.
- Ellis, L. B. See Weiss, S.
- Ellis, M. D. See Ellis, M. H.
- Ellis, M. H., Motley, H. L., and Ellis, M. D., splenic derivatives and erythrocyte fragility, A., 643.
- Ellis, M. M., arsenic storage in game fish, B., 875.
- Ellis, N. R. See Whittier, E. O.
- Ellis, O. C. de C., afterglow in gaseous explosions, B., 1167.
- Ellis, O. W., structure and constitution of an alloy steel, B., 151. Deoxidation and degasification of red brass and bronze; report of Committee of A.F.A. Non-Ferrous Division, B., 1048.
- See also Westinghouse Electric & Manuf. Co.
- Ellis, W. C., and Schumacher, E. E., magnetic materials; a survey in relation to structure, B., 158.
- See also Bell Telephone Labs.
- Ellis-Foster Co. See Bradley, T. F., and Ellis, C.
- Ellison, H. L., and Hazel, F., influence of concentration and age on some colloidal properties of ferric chloride solutions, A., 1074.
- Ellison, L. R., and Hall, G. F., effect of varying storage conditions on deterioration of ergosterol, A., 487.
- Elliss, H. See Andrew, J. H.
- Ellms, E. H. See Barrett Co.
- Ellsberg, E., and Tide Water Oil Co., treatment of hydrocarbons, (P.), B., 181. Chilling of lubricating oils for dewaxing, (P.), B., 486.
- Ellsworth, D. C., and Dupont Rayon Co., preparation of benzylcellulose, (P.), B., 1137.
- See also Du Pont de Nemours & Co., E. I.
- Ellsworth, H. C. See Holman, D. V.
- Ellsworth, R., and Howard, J. E., physiology of parathyroid glands. VII. Responses of normal human kidneys and blood to intravenous parathyroid extract, A., 900.
- Ellzey, E. F. See Nat. Aniline & Chem. Co., Inc.
- Elm, A. C., relationship between pigment-vehicle ratio and durability of exterior house paints, B., 238. Century of progress in driers, B., 366.
- See also Stutz, G. F. A.
- Elman, R., and Eckert, C. T., gastric acidity as influenced by pyloric closure and stenosis, A., 884.
- Elmer, A. W., iodine tolerance test for thyroid insufficiency, A., 519.
- and Luczynski, Z., rôle of the liver in regulation of blood-iodine, A., 115.
- and Rychlik, W., elimination of iodine in human colostrum and milk, A., 106.
- Excretion of iodine in urine after ingestion of inorganic iodine, thyroxine, and di-iodotyrosine, A., 115.
- Rychlik, W., and Schepps, M., hyperthyroxinæmia in thyrotoxicosis, A., 108.
- and Schepps, M., distribution of iodine in adrenal cortex and medulla, A., 772. Thyroxine and di-iodotyrosine content of the foetus and the new-born, A., 772. Iodine content of blood and urine and basal metabolism; their value in diagnosis of thyroid function, A., 775.
- Elmquist, R. E., and Hartley, O. P., methylene-blue absorption as a quantitative measure of wool damage, B., 986.
- Elöd, E., mordanting and dyeing processes. XXII. Reaction between protein fibres and substantive dye-stuffs, B., 302.
- and Cantor, T., theory of chrome tannage, B., 323.
- Elöd, E., and Schachowskoy, T., mordanting and dyeing processes. XXI. Investigation of chemical reactions in gelatin by means of measurements of light absorption. XXVI. Theory of mineral tanning; chrome tanning of gelatin. XXVII. Action of metal compounds on gelatin, A., 301; B., 818, 864.
- Schachowskoy, T., and Weber-Schäfer, M., mordanting and dyeing processes. XXIX. Theory of mineral tannage, B., 1008.
- Elphick, B. L., and McMahon, P. R., estimation of dry matter in mangels, B., 285.
- Elphinstone, I., dyeing and finishing of corset cloth, B., 800.
- Elrod, H. E., centrifugal machine, (P.), B., 706.
- Elsasser, W. M., constitution of elementary particles and nuclear forces, A., 143. Nuclear forces, A., 150. Isotopes and nuclear structure, A., 1051.
- See also Ferrin, F.
- Elsdon, R., heterogeneity of steel ingots. V. Bibliography on determination of oxygen in iron and steel, B., 994.
- Elsen, G., the actinium problem. V., A., 910.
- Elser, W. J., desiccation of liquids and semi-solids, (P.), B., 579.
- Elsey, H. M. See Westinghouse Electric & Manufg. Co.
- Elsner, G., surface improvement of aluminium and its alloys, B., 460.
- Elstner, G., constitution of the heteropolyacids, A., 947.
- Elteste, G., determination of neutralisation and saponification values of mineral oils, B., 293.
- Elting, E. C. See La Master, J. P.
- Elvehjem, C. A., Hart, E. B., Jackson, H. C., and Weckel, K. G., nutritional value of milks: raw *versus* pasteurised and summer *versus* winter milk, B., 475.
- and Koehn, C. J., jun., non-identity of vitamin- B_2 and flavins, A., 262. Vitamin- B_2 ; non-identity of vitamin- B_2 and flavins, A., 669.
- See also Clifcorn, C. A., Deobald, H. J., Keenan, J. A., Kline, B. E., Sherman, W. C., and Stirn, F. E.
- Elvove, E. See Dean, H. T.
- Ely, J. O. See Schoonover, J. W.
- Embden, G., and Deuticke, H. J., action of fluoride and bromoacetic acid on intermediary processes in glycolysis in muscle, A., 250. Significance of phosphoglyceric acid for glycolysis in muscle, A., 250.
- Deuticke, H. J., and Kraft, G., production of an optically active phosphoglyceric acid by glycolysis in muscle, A., 250.
- and Ickes, T., isolation of glycerophosphoric acid from fluoride-poisoned muscle, A., 250.
- and Jost, H., intermediate stages in glycolysis in striped muscle, A., 251.
- Emblík, cooling of concrete: new application of refrigeration technique, B., 1143.
- Embree, N. D. See Harned, H. S.
- Emde, resin acids of spruce and their fate in the manufacture of sulphite cellulose, B., 586.
- Emde, H., citric acid fermentation, A., 407. Lactone of sulphite waste and tsugarresinol, A., 1126.

- Emde, H., and Schartner, H., sulphite liquor lactone and tsugaresinol, A., 83. Constituents of resins. I. Lactone of sulphite waste and tsugaresinol, A., 623.
- Emden, R., thermodynamic problem, A., 1204.
- Emeléus, H. J., James, F. W., King, Alexander, Pearson, T. G., Purcell, R. H., and Briscoe, H. V. A., isotopic ratio in hydrogen; density comparisons on water from various sources. II., A., 156.
- and Jolley, L. J., kinetics of thermal decomposition of methylamine, A., 1081.
- and Stewart, K., oxidation of silane, A., 451. Oxidation of silicon hydrides. I., A., 1207.
- Emelius, K. G., Faraday dark space, A., 1184.
- and Duffendack, O. S., inert gas molecules, A., 135. Spectral and impact phenomena in the Faraday dark space, A., 556.
- Emerique, L., chemical composition of the white rat during the course of avitaminosis-A, A., 1034.
- Emerson, C. P., jun., and Helmer, O. M., reaction and carbon dioxide content of the venous plasma in pernicious anemia, A., 514.
- Emerson, G. A., colorimetric determination of morphine in biological fluids by the iodoxybenzoate method, A., 397. Sex variation in ketonuria of ether anesthesia in rats, A., 1410.
- and Anderson, H. H., acute toxicity of ethyl chaulmoograte, A., 1533.
- Emerson, O. H., and Schmidt, C. L. A., attempts to isolate dihydroxypyroglutamine from gelatin hydrolysates, A., 876.
- Emery, E. S., jun. See Schnitker, M. A.
- Emery, F. E., and Schwabe, E. L., duration of oestrus in ovariectomised and adrenal-ovariectomised rats before and after theelin, A., 1426.
- and Winter, C. A., adrenotropic substance of the pituitary as influenced by age, castration, sex, and thyro-parathyroidectomy, A., 412.
- See also Griffith, F. R., jun.
- Emery, F. H. See Braidech, M. M.
- Emge, L. A. See Wulff, L. M. R.
- Emi, K., electrolytic substitution of naphthols. I. Electrolytic preparation of nitroso- β -naphthol from β -naphthol, and of β -nitroso- α -naphthol from α -naphthol, B., 1036.
- Emi, M., chemical change of carbon disulphide under electrodeless discharge, A., 46.
- Emich, F. See Harand, J.
- Emigh, W. C., algal growth raises p_H of water, B., 128.
- Emlyn Anthracite Colliery, Ltd. See Samuel, J. O., and Thomas, G. E. A.
- Emmart, K. See Anderson, A. K.
- Emmer, V., effect of 2:4-dinitrophenol on oxygen consumption, blood-sugar, and cholesterol, A., 1159.
- Emmerie, A., Carr-Price reaction of the fatty acids of cod-liver oil after vigorous saponification, A., 1177.
- See also Eekelen, M. van.
- Emmert, E. M., determination of availability of nitrogen and phosphorus to plants, B., 515.
- Emmert, E. M., tests for phosphate, nitrate, and soluble nitrogen in conducting tissue of tomato and lettuce plants, as indicators of availability and yield, B., 742. Rapid determination of nitrogen in plants: soluble nitrogen as a measure of the nitrogen available for anabolic processes, B., 919.
- Emmett, H. E. G., and Ashby, E., relation between p_H of soil and plant distribution, A., 132.
- Emmett, P. H., and Harkness, R. W., adsorption of hydrogen by iron synthetic ammonia catalysts, A., 1315. Catalytic interconversion of ortho-para-hydrogen over iron, platinum, and nickel catalysts, A., 1329.
- See also Brunauer, S.
- Emo, L., neutron excitation in beryllium, A., 802.
- Empire Oil Refining Co. See Camp, H. W., and Walker, John Charles.
- Empson, A. W. See Stone & Co., Ltd., J.
- Emschwiller, G., chemical action of light on di-iodo-derivatives of hydrocarbons: di-iodoethanes, di-iodomethane, A., 48.
- See also Dubrisay, R.
- Emslie, A. R. G. See Auchinachie, D. W.
- Enamellers Guild, Inc. See Rosenberg, J. E.
- Endell, K., and Fendius, H., apparatus for measuring viscosity of sludges and deformability of plastic masses, B., 49. Resistance viscosimeter for ceramic moulding material and cement sludge, B., 681.
- Hofmann, U., and Wilm, D., siliceous and micaceous clays, A., 601.
- Tiensch, A., and Wens, C. [with Kalb, G.], temperature-viscosity relations of lead slags, B., 551.
- and Wens, C., temperature-viscosity relations of coal ashes, B., 211. Increase in plasticity [of mortars, etc.] by addition of bentonite, B., 547.
- See also Hofmann, U.
- Ender, F., difference in vitamin-A content of cow- and bull-liver, A., 129. Vitamin-E and fertility of poultry, A., 794.
- Ender, W. See Schwalbe, C. G.
- Enderlin, L., magnetic susceptibility of tetraphenylrubene and of its dissociable oxide, A., 689.
- Enders, W., influence of structure on durability of steel, B., 676.
- Endô, E., and Furuya, H., recent aviation fuel, B., 614.
- Endô, Hikoô, and Sekiguchi, H., effect of light on corrosion of steel in aqueous solutions, B., 191.
- and Tagaya, M., corrosion-protective films on surface of light alloys, B., 502.
- Endo, Hiroshi, adrenalin content of adrenal glands of grown rats, A., 1173.
- Endo, T. See Osugi, S.
- Endôh, Hidemaro, detection of vulcanised and unvulcanised parts in cold-cured stocks, B., 468. Acetone extraction of raw rubber. I. Effect of time of heating of alcohol solution on determination of acid value of raw rubber and its acetone extract. II. Influence of heating at 100° and storing of acetone extract on acid value. III. Effect of time of extraction on the acid value of the extract and of the residue. IV. Relation between time of saponification and saponification value of raw rubber and its acetone extract.
- Endôh, Hidemaro, acetone extraction of raw rubber. V. Influence of heating at 100° and storing acetone extract on saponification value. VI. Saponification value of acetone-extracted residue of raw rubber, B., 861, 915, 1057.
- Endrédy, A. von, densities of aqueous boric acid solutions and apparent molecular volume of H_3BO_3 in them, A., 575.
- Endres, G., nitrogen-assimilating bacteria. II. Fixation of atmospheric nitrogen by *Azotobacter*, A., 1167.
- Endres, H. A., and Wingfoot Corp., compounding of rubber, (P.), B., 280.
- Endriz, J. D. See Herbst, C. A.
- Endtz, A. W., calcium content of bone determined *in vivo*, A., 1396.
- Enfield Cable Works, Ltd., Bowden, E., and O'Duffy, D., protective coatings and sheathings for cables, pipes, etc., (P.), B., 639.
- Eng, H., absorption and excretion of folliculin in man. II. Excretion in urine and faeces, A., 128.
- Engberg, M. J., basic zinc carbonate, (P.), B., 187.
- Engel, A. von, effect of chemical reactions on cathode and anode in an arc discharge, A., 942. Energetic relations in electrodes of a metal arc (direct-current welding arc), B., 1050.
- Engel, F. L. See Webster, M. D.
- Engel, G., crystal structure of hexachlorosalts, A., 433, 812.
- Engel, G. L., and Chao, I., comparative distribution of organic phosphates in skeletal and cardiac muscles of *Limulus polyphemus*, A., 511.
- Engel, H., physiology of nitrifying organisms in natural soils. II. Influence of glucose on nitrification, B., 372.
- See also Lemmermann, O.
- Engel, K. See Rupe, H.
- Engel, L. L., determination of iron in dental enamel, A., 377.
- See also Herbst, R. M.
- Engel, P., effect of anterior pituitary and pineal hormones on growth of inoculation tumours, A., 886. Sex hormones and pituitary growth, A., 902.
- Engelberg, H. See Klanfer, K.
- Engelhard, F. J. W. See Prins, H. J.
- Engelhard, H., and Stiller, W., vapour pressure isotherms of water on active charcoal applied to its behaviour towards carbonyl chloride, A., 160. Behaviour of gas masks towards water mist, B., 479.
- Engelhardt, V., Schönfeldt, N., and Siemens & Halske A.-G., electrolytic cell, (P.), B., 910.
- Engelhart, E. See Riml, O.
- Engelke, E. F. See Doherty Research Co.
- Engelke, H., absolute and ordinary sp. gr. and a new apparatus for their rapid determination, B., 177. Göttingen method of testing wheat quality and baking test, B., 203. Micro-methods for determining quality of wheat: new micro-method, B., 872.
- Engelmann, E. W., recovering gold from copper-mill tailing, B., 953.
- Engels, O., phosphates in beet agriculture, B., 72. Determination of fertiliser requirement of soil from soil examination, B., 324.
- See also Kling, M.
- Engels, W., preserving agents for wood, stone, etc., (P.), B., 457.

- Engelstad, R. B., and Moxnes, N. H., possible action of cosmic rays on living organisms, A., 247.
- Engert, G. A. See under Sonbert Machine Co.
- Engl, J., and Heidtkamp, G., temperature variation of critical indentation hardness of metals. I., A., 922.
- England, A., jun., and Cohn, E. J., physical chemistry of amino-acids, peptides, and related substances. IV. Distribution coefficients of amino-acids between water and butyl alcohol, A., 696.
- Engle, E. W., Cobb, H. L., and Fansteel Products Co., Inc., [unidirectional] electrolytic condenser, (P.), B., 316.
- Engledow, F. L., and Woodman, R. M., use of wetter in weed spraying, B., 1111.
- Engler, W. See Dadiou, A.
- Englert, E., displacement of the Curie point by tension, A., 1452. Negative Matteucci effect, A., 1452.
- English, A. G. H. See Harris, I.
- English, L. L. See Miller, R. L.
- English, L. W. See Auto-Klean Strainers.
- English Clays, Lovering, Pochin & Co., Ltd., and Davies, R. J., treatment of clays, (P.), B., 950.
- English Electric Co. See Whessoe Foundry & Eng. Co.
- Engs, W. See Shell Development Co.
- Engstrom, tanning with pure sulphite-cellulose extract in Stalin tannery, Mogilev, B., 817.
- Enklewitz, M., identity of reducing substance in urine of normal persons after ingestion of amidopyrine, A., 1017.
- and Lasker, M., origin of l-xyloketose (urine-pentose), A., 1147.
- Enlund, B. D., microscopical investigation of cast [-steel] structures, B., 770.
- Enoschevskaja, K. K. See Feldman, O. S.
- Ensleme, J. See Florence, G.
- Ensink, A., and Hofman, J. J., determination of chlorate content of potassium and sodium chlorates, B., 990.
- Enslin, O., Lindau, G., and Rhodius, R., determination of electrophoretic migration velocity of suspended particles, and process for measuring charge of hydrophobic sols, A., 443.
- Enzinger-Union-Werke Akt.-Ges., sterile filters, (P.), B., 290.
- Enzor, O. K., and Dorsey, H. E., electrolytic gas-producing device, (P.), B., 415.
- Epel-Bogoslovskaja, T. See Suchorukov, K.
- Epelbaum, S., and Zuverkalov, D., chemical investigation of the liver oil of *Barbus brachicephalus*, A., 1521.
- See also Fomin, S. V., and Gorodisski, H.
- Epelbaum, S. E., comparative biological value of maize, wheat, and soya beans as sources of proteins, B., 923. Raising assimilability of protein in soya beans by adding meat to the ration, B., 923.
- Eppson, H., phytochemistry. CXII. *Corydalis aurea*, A., 672.
- Epstein, A. K., cake product, (P.), B., 379.
- Reynolds, M. C., and Harris, B. R., margarine, (P.), B., 252.
- See also Reynolds, M. C.
- Epstein, J. A. See Vladimirov, G. E.
- Epstein, S., and Lorig, C. H., carburising of copper steels, B., 594.
- Nead, J. H., and Washburn, T. S., grain-size control of open-hearth carbon steels, B., 550.
- Epstein, S. F., influence of insulin on the phosphorus exchange in muscle, A., 1543.
- Epstein, S. S., and Levine, M., Voges-Proskauer reaction, A., 1419.
- Erbacher, O., and Philipp, K., identification of artificial radioactive elements produced by neutron bombardment, and their application in chemistry as indicators, A., 947.
- Erbe, F., determination of particle size of silicic acid in a silicic acid glycerosol, A., 1318.
- Erber, B., incandescence electric lamp filaments, (P.), B., 158.
- See also Mollaret, P.
- Erbring, H. See Sakurada, K.
- Ercoli, A., derivatives of carbamylcholine, A., 1228.
- See also Belfanti, S.
- Erdélyi, J. See Reichert, R., and Rosenthal, E.
- Erdey-Grúz, T., electrolytic growth of metal crystals. I. Growth of silver crystals in aqueous solutions, A., 450.
- Erdheim, E., viscosity of dilute [lubricating] oils and of oil mixtures, B., 484. Action of bleaching earths [on benzene], B., 757.
- and Schneider, O., action of bleaching earths [on benzene], B., 582.
- and Steiner, L., kinematic viscosity, and a case of anomalous viscosity, A., 575.
- Erdmann, K., origin of inhibition of cell division by X-rays, A., 1276.
- Erdős, G. See Kuhn, W.
- Erdős, J., condensation-fractionation flask, A., 467. Heated laboratory press, A., 599. Evaluation of liver and stomach preparations, A., 885. Chemical composition of liver preparations, A., 885. Rapid determination of water in small quantities of material, A., 1471. Hydrogenation apparatus for small quantities of material, A., 1476.
- and Süri, J., new derivatives of phenyldimethylaminopyrazolone, A., 990.
- Erdtman, H., phenol dehydrogenation. V. Dehydrogenation of trimethylphloroglucinol; structure of cedron. VII. Coupling by dehydrogenation of guaiacol derivatives, A., 80, 1237. Constitution of resin phenols and their biogenetic relationships. I. Pinoresinol. II. Pinoresinol and its relationship to eudesmin, A., 218, 627.
- and Léon, A., influence of R-COO- and R- groups on cationoid reactivity of quinone nucleus, A., 982.
- See also Euler, H. von.
- Eremeev, M., Kurtschatov, I. V., and Schtschepkin, G., scattering of slow neutrons by hydrogen, A., 1296.
- See also Kurtschatov, I. V.
- Eremina, E. See Orekhov, A.
- Erf, L. A. See Scott, E.
- Ergolskaja, Z., origin of Barzass coals, A., 61.
- Erhard, G. T., and Schaefer, G. M. P., remedy containing an emanation, (P.), B., 124.
- Erhardt, R. von, fine-grain development in highly concentrated metal and fine-grained intensification, B., 478.
- Erich, V. N. See Bart, E. V.
- Erickson, B. N. See Hunscher, H. A.
- Erickson, D. L., iron and manganese removal plant for [water supply of] Lincoln, Nebraska, B., 527.
- Erickson, J. L. E., and Barnett, M. M., cleavage of organic magnesium compounds. I. Cleavage of malononitriles, A., 619.
- Ericson, G., determination of change in volume of iron on solidification, B., 548.
- Ericson, G. R., viscosimeter, (P.), B., 388.
- Ericson, H. See Miner, C. S.
- Eriksson, S., X-ray investigation of the system iron-chromium-nitrogen, A., 1455.
- Eriksson, T. See Hägglund, E.
- Erk, S., arrangement for microscopical work at low temperatures, A., 1097, 1217.
- Erlbach, H., d-glucosaccharosonic acid. IV. Fission to compounds of C₄ series, A., 608.
- Erlenmeyer, H., [ψ -atoms], A., 61. Systematisation of simple inorganic acids, A., 431.
- and Berger, E., immuno-chemistry of pyrazolone series, A., 105.
- and Gärtner, H., laboratory arrangement for electrolytic fractionation of hydrogen isotopes. III., A., 589.
- and Geiger-Huber, M., sex reversal of *Metandrium album* by a fungus, A., 1181.
- and Lobeck, H., behaviour of metal ammoniates in water containing deuterium oxide, A., 1332.
- and Willi, E., relations between oxidation-reduction potentials and acidity potentials in organic derivatives of arsenic acid, A., 1079. ψ -Atoms and isoteric compounds. V. Relation between constitution and reactions of pyrazolone derivatives, A., 1132.
- See also McDougall, E. J.
- Erlichman, E. See Yogelaar, J. P. M.
- Erlikh, B., hermetic containers for calcium carbide, B., 671. Breaking of [crude oil] emulsions, B., 1029. Utilisation of kerosene alkali sludge in de-emulsification of crude oil, B., 1029. Preliminary caustic treatment of crude oil, B., 1029.
- See also Skruinnikov, Z. V.
- Ermen, W. F. A., and Lord, W. M., cuprammonium hydroxide solutions for fluidity determinations, B., 540.
- Ermolaev, A., and Raiz, O., zinc oxide, kaolin, and whitening in carbon black mixtures with natural and synthetic rubber, B., 861.
- Ernest, A., manuring of soils in dry climates. VIII. Czechoslovakia, B., 515. Manuring of newly cultivated soils. XI. Czechoslovakia, B., 515.
- Ernest, E. C. M., factors rendering the plasmolytic method inapplicable in determining osmotic values of plant cells, A., 1547.
- Ernotte, M., asphaltic product, (P.), B., 538. Dispersing and stabilising hydrocarbon oils, etc., (P.), B., 758.
- Ernst, A. H. See Du Pont de Nemours & Co., E. I.
- Ernst, E., and Fricker, J., combined or free potassium in muscle, A., 232. Permeability and ion concentration in muscle excitation, A., 239.
- and Nieland, H., plagioclase from Linosa: the anomalous question, A., 323.
- See also Zechmeister, L.
- Ernstene, A. C., Riseman, J. E. F., Stern, B., and Alexander, B., mechanism of circulatory changes accompanying insulin hypoglycemia, A., 1422.

- Ero, W. See Smolenski, K.
- Eropkin, D., distribution of energy in the ultra-violet solar spectrum as inferred from photochemical theory of ozone equilibrium in the earth's atmosphere, A., 8.
- Eroschevski, I. G., utilisation of solidified pine pitch. II. Preparing rosin soap, B., 1055.
- Erren, R. A., pressure electrolyzers, (P.), B., 910.
- Errera, J., and Mollet, P., intramolecular isomerism and infra-red absorption spectra, A., 564.
See also Cartwright, C. H.
- Errera, M. See Bloch, B.
- Erschov, A. See Zdanov, V.
- Erslev, K., aerated beverages, (P.), B., 972.
- Erspermer, A. See Stout, L. E.
- Ertel, H., connexion between atomic and cosmic constants in the expanding universe, A., 278. Ratio of the mass of the proton to that of the electron, A., 912. Absolute field constant in Born's new field theory, A., 1050. Sommerfeld's fine structure constant, A., 1187.
- Erter, J. H., and Alco Products, Inc., fractionating tower control system, (P.), B., 387.
and Foster Wheeler Corp., desulphurisation of oil, (P.), B., 1126.
- Erxleben, H. See Kögl, F.
- Esau, P. See Turbovsky, M. W.
- Esch, W., discoloration of cellulosic materials by contact with vulcanised rubber, and its causes, B., 738.
- Eschenbrenner, H., stabilisation and sterilisation of solutions in pharmaceutical practice, B., 1067.
- Escher Wyss Maschinenfabrik Akt.-Ges., means for admitting to, and carrying off liquid or gaseous media from, the interior of a revolving hollow shaft, (P.), B., 482.
- Eschtschenko, A. See Krestinski, V. N.
- Esobar-Bordoy, J. See Hendrych, F.
- Escombe, G. C. See under Pizey & Son, G.
- Escribano, A., and Moles, E., molecular volume of water in sodium salts, A., 916.
- Esoudero, A., value of Gorhardt and Legal tests for determining ketonic compounds, A., 1147.
- Eserova, E. A. See Saslavski, A. J.
- Eskew, R. K., and Du Pont Visceloid Co., treatment [stabilisation and reduction of viscosity] of cellulose esters, (P.), B., 184. Treatment [viscosity reduction] of cellulose esters [nitrate], (P.), B., 668.
- Eskola, P., porphyry from Gulf of Bothnia, A., 841. Diffusion and reactions in solids, A., 841.
- Esling, F., improved form of sulphur determination apparatus [for mineral oils], B., 179.
- Espe, D. L., and Cannon, C. Y., relation of fat content of milk to passage of milk curd from stomach of the calf, A., 1152.
See also Cannon, C. Y., and Mortenson, F. N.
- Espe, O. W., heat-resistant and heat-loving bacteria and their control in pasteurising plants, B., 1066.
- Espe, W., and Evers, F., glow cathode, (P.), B., 639.
- Espezel, P. See Jaumes, P.
- Espholin, E. G. S., preservation of milk product known as "skyr," (P.), B., 173.
- Espig, H. See I. G. Farbenind.
- Espil, L., methylal as solvent in analytical chemistry, A., 182. Organic carbon in sea-water, A., 949. Ionic ratios in sea-water, A., 953.
See also Genevois, L.
- Espinasse, P. G., specific action of œstrin, A., 128.
- Ess, M. W. van, and Edgar, R., alkaline hydrolysis of cellulose acetate rayon, B., 488.
- Esselen, G. J., and Fiberloid Corp., seasoning of sheets containing a solvent, (P.), B., 223.
- Esser, H., Eilender, W., and Bnngerth, A., spectrographic examination of flocks in chromium-nickel steels, B., 499.
and Momm, G., change in magnetic saturation on tempering quenched plain steels, B., 63.
and Ostermann, G., influence of heat treatment on magnetic saturation of plain steels, B., 63.
- Essex, H., and Kelly, W. R., fugacities of ethyl alcohol and water in their gaseous mixtures; deviations from perfect solutions, A., 816.
- Essex, H. E. See Pollack, H., and Steg-gerda, F. R.
- Essex Foundry. See Snell, F. D.
- Essin, O., overvoltage theory and simultaneous discharge of several ionic species, A., 450.
and Alfimova, E., influence of the cation on electrolytic formation of persulphate, A., 831. Simultaneous discharge of nickel and hydrogen ion from solutions of simple nickel salts, A., 1330.
and Balabaj, A., simultaneous discharge [of ions] at the cathode in electrolysis of zinc [sulphate], A., 310.
Balabaj, A., and Matanzev, A., simultaneous discharge of hydrogen ion and metal ions from solutions of complex cyanides, A., 937.
and Beklemischeva, T., mechanism of appearance of potential [at metallic electrodes] in solutions containing foreign ions, A., 706.
and Lotzmanova, M., potential of metals in solutions of other ions, A., 449.
- Estabrook, G. B., effect of high electrostatic fields on vaporisation of molybdenum, A., 21.
- Estey, R. S., adjustment of Lovibond red glasses, A., 1097.
- Esty, J. R., control of processing of canned foods in California, B., 331.
- Esveld, L. W. van, chloreton as preservative for adrenaline solutions, B., 123.
- Établissements Cottereau Société Anonyme, impervious paper, (P.), B., 588.
- Établissements Elka S.á.R.L. See Stern, M.
- "Eternitas" Akciové Továrny Dehtových Vyrokbů a Krycích Emot, colouring sheeted asbestos-cement composition material, (P.), B., 308.
- Etheridge, W. See Key, A.
- Étienne, A. See Dufraisse, C., and Du Pont de Nemours & Co., E. I.
- Ettinger, J. L. See Saslavski, A. J.
- Ettore, V., practical use of titer control of textile fibres, B., 398. Swelling of cellulose, B., 401.
- Etzelmiller, R. E. See Du Pont de Nemours & Co., E. I.
- Etzkorn, R., and North Amer. Rayon Corp., artificial [silk] ribbons, etc., (P.), B., 351.
- Etzold, H. See Seith, W.
- Etzrodt, A., direct influence of light on electrical resistance of metals, A., 923.
- Etzrodt, H. See Feist, K.
- Eubanas, F. See Hermano, A. J.
- Eucken, A., transformations of state of a higher kind, A., 155. [Thermodynamic equilibria], A., 446. Mechanism of primary reaction between carbon dioxide or oxygen and graphite; kinetics of combustion of coal, A., 588. Affinity factors in molecular collisions, A., 1448.
and Becker, Rudolf, collision excitation of intramolecular vibrations in gases and gas mixtures studied by sound dispersion measurements. I. Experimental method and results of precise measurements of velocity of sound in ultrasonic region. II. Dispersion of sound at various temperatures in chlorine and carbon dioxide, pure and with admixed foreign gases, A., 155.
and Berger, W., $I-T$ diagram for methane, A., 1454.
and Büchner, A., dielectric constants of weakly polar crystals and their variation with temperature, A., 430.
and Dannöhl, W., preliminary calculation of molecular heat c_p of sodium chloride and metals at high temperatures, A., 20. Thermal expansion of alkali halides and metals at high temperatures, A., 21.
and Förster, F., direct determination of free paths of electrons in metals, A., 153. Derivation of free path of metal electrons in bismuth from electrical resistance of very thin single crystal wires, A., 434.
and Warrentrup, H., variation of thermal and electrical resistance during precipitation-hardening of aluminium-copper alloys, B., 729.
- Eugène, F., [micro-hardness-testing machine, B., 230.
- Euler, H. (Düsseldorf), and Guthmann, K., errors in measurement of temperatures with thermocouples, B., 1025.
- Euler, H. von (Stockholm), enzymic oxidation and reduction systems, A., 121. Phosphates, A., 534. Vitazymes and hormozymes, A., 1161. Chemical studies on enzymes. II., A., 1161.
and Adler, Erich, components of the dehydrase system. II.—IV. VI. Enzymic oxidation of hexoses in presence of adenosinetriphosphoric acid. VIII. Activators, A., 658, 1276.
- Adler, Erich, and Dahlgren, G., inhibitor of fermentation in yeast, A., 1418.
- Adler, Erich, and Pétursson, M., adenosinetriphosphoric acid in living yeast, A., 1418.
- Adler, Erich, Schlenk, F., and Günther, G., components of dehydrase systems. V. Actions of coenzyme, Warburg's co-enzyme, and adenylypyrophosphate, A., 782. Characterisation of three co-enzymes concerned in biological oxidation-reduction processes, A., 1161.
- Albers, H., and Schlenk, F., [properties of] highly purified coenzyme, A., 1024.
- Bergman, B., and Hellström, H., proportions of chloroplast numbers and chlorophyll concentration in *Elodea densa*, A., 263.

- Euler, *H. von* (Stockholm), and Brandt, *K.*, blue-fluorescing substance in the corpus luteum, A., 1145, 1265.
- Burström, *D.*, and Günther, *G.*, phytohormones, A., 265.
- and Erdtman, *H.*, gramine from Swedish strains of barley, A., 1386.
- and Günther, *G.*, activation of glycolysis by heat-inactivated cozymase preparations, A., 1162. Temperature stability and formation of cozymase, A., 1165. Activators of glycolysis; cozymase and adenosinetriphosphoric acid, A., 1278.
- and Hagen, *J.*, course of reaction of halogenoacetic acids with cysteine and with thioglycolic acid, A., 453.
- Hellström, *H.*, and Brandt, *K.*, photochemical oxidation-reduction equilibrium in methylene-blue solutions, A., 1087.
- Hellström, *H.*, and Löfgren, *N.*, chemical genetics of barley mutants; chlorophyll and gramine contents of the mutants, A., 1040.
- Karrer, *P.*, Malmberg, *M.*, Schöpp, *K.*, Benz, *F.*, Becker, *B.*, and Frei, *P.*, synthesis of lactoflavin (vitamin-*B₂*) and other flavins, A., 760.
- and Klusmann, *E.*, acceleration of an enzymic dehydrogenation by irradiation, A., 121.
- and Malmberg, *M.*, antiscorbutic action of the eye lens and its reductone and thiol content, A., 232. Vitamin-*C* consumption and storage in the animal, A., 546. Keratinisation of the epithelial mucous membranes on vitamin-*A* and carotene deficiency; anti-infective action, A., 668. Characteristics of avitaminosis in rats caused by lack of skin factors in the diet, A., 1035. Excretion and storage of vitamin-*C* in the human and animal body. I. Vitamin-*C* content of the urine of inhabitants of Sweden, A., 1286.
- Söder, *H.*, and Malmberg, *M.*, action of the diet-factor *J* on development of pneumonia in guinea-pigs, A., 1010.
- and Svensson, *T.*, activation of enzymic reactions. I., A., 1165.
- and Vestin, *R.*, activated transformation of phosphate during glycolysis, A., 1418.
- and Weichert, *R.*, biochemistry of chlorophyll-defective barley mutants, A., 263. Dehydrogenating enzyme systems in germinating seeds. I., A., 795.
- and Zondek, *B.*, stability of prolant; its enzymic nature, A., 791.
- See also Baudisch, *O.*, Brandt, *K.*, Hellström, *H.*, Karrer, *P.*, and Malmberg, *M.*
- Euler, *U. S. von*, some factors influencing heat production of muscle after stretching, A., 1414.
- and Liljestrand, *G.*, effect, in the dog, of sinus blockage on adrenaline, sugar, and calcium content of blood, and on oxygen requirements, A., 1158.
- Euringer, *G.*, time variation of gas emission from heated wires *in vacuo*, A., 1313.
- Europäischer Verband der Flaschenfabriken G.m.b.H., lehrs for annealing glassware, (P.), B., 228.
- Eustatziou, *G.*, Popesco, *I.*, and Stamatesco, *S.*, basal metabolism in rabbits and the Schwartzman phenomenon, A., 1003.
- Eustis, *F. A.* See Cain, *J. K.*
- Eva, *W. J.* See Geddes, *W. F.*
- Evangelides, *K.* See Mcdes, *G.*, and Zenghélis, *C.*
- Evans, *A. C.*, chemical changes associated with metamorphosis in a beetle (*Tenebrio molitor*, L.), A., 889.
- Evans, *A. G.*, and Evans, *M. G.*, mechanism of reactions between alkali [metal] atoms and halogen hydrides, A., 1327.
- See also Bawn, *C. E. H.*
- Evans, *B. S.*, simple siphoning device, A., 600. Device for preventing loss of stoppers, taps, etc., A., 600. Adapter collars for use in filtration, A., 600. Volumetric determination of beryllium, A., 837. Moving mercury cathode apparatus, A., 952. Determination of small amounts of zinc in commercial nickel, B., 771.
- Evans, *Charles Livesey*. See Rhead, *T. F. E.*
- Evans, *Charles Lovatt*, Grande, *F.*, and Hsu, *F. Y.*, glucose and lactate consumption of the dog's heart, A., 1273.
- Grande, *F.*, Hsu, *F. Y.*, Lee, *D. H. K.*, and Mulder, *A. G.*, glucose and lactate usages of the diabetic heart and influence of insulin thereon, A., 1269.
- Evans, *D. J.*, [portable] electrolytic cells [for electrolysis of brine], (P.), B., 508.
- Evans, *D. M.*, Dorsett, *W. C.*, and Petroleum Conversion Corp., purification of hydrocarbon oils, (P.), B., 215.
- Evans, *D. P.*, Morgan, *V. G.*, and Watson, *H. B.*, influence of nuclear substituents on side-chain reactions. II. Factors controlling velocities of acid-catalysed prototropy of nuclear-substituted acetophenones. IV. Reconsideration of quantitative relationship between energies of activation and dipole moments, A., 1191, 1209.
- See also Jones, *W. J.*
- Evans, *E. A., jun.* See Jensen, *H.*, and Wakefield & Co., Ltd., C. C.
- Evans, *E. I.*, antioxidant properties of vegetable lecithin, B., 596.
- Evans, *E. J.* See Gabe, *S.*
- Evans, *F. L.*, and Tanner, *F. W.*, effect of meat-curing solutions on anaerobic bacteria. IV. Mixed curing solutions, B., 476.
- See also Tanner, *F. W.*
- Evans, *F. V.*, applied colloid chemistry of pigments, with special reference to zinc oxide and basic lead carbonate, B., 959.
- Evans, *G.*, glycogen content of the heart, A., 521. Effect of low atmospheric pressure on glycogen content of the rat, A., 777.
- Evans, *G. H.* See Ferguson, *A. L.*
- Evans, *G. S.*, and Mathieson Alkali Works, Inc., detergent composition, (P.), B., 543; solid detergent, (P.), B., 543.
- Evans, *H.* See Sykes, *C.*
- Evans, *Harry*, botany research [sugarcane], A., 266; B., 1011.
- Evans, *Hugh*. See Cervený, *C. J.*
- Evans, *H. M.*, and Lepkovsky, *S.*, sparing action of fat on vitamin-*B₁*. VIII. Loss of vitamin-*B₁* from the rat's tissues, A., 544.
- Evans, *H. M.*, Lepkovsky, *S.*, and Murphy, *Elizabeth A.*, sparing action of fat on vitamin-*B₂*, A., 130. Sparing action of fat on vitamin-*B₁*. VI. Influence of the levels of protein and vitamin-*B₂*. VII. Effectiveness of natural fats in sparing vitamin-*B₁*, A., 130.
- Murphy, *Elizabeth A.*, Archibald, *R. C.*, and Cornish, *R. E.*, preparation and properties of vitamin-*E* concentrates, A., 548.
- Pencharz, *R. I.*, and Simpson, *M. E.*, maintenance and repair of reproductive system of hypophysectomised male rats by pituitary synergist, pregnancy-prolan, and combinations thereof, A., 541. Repair of the reproductive system of hypophysectomised female rats by combinations of a pituitary extract (synergist) with pregnancy-prolan, A., 541.
- and Simpson, *M. E.*, reduction of the thymus by gonadotropic hormone, A., 412. Response of the gonads of immature pigeons to gonadotropic hormones, A., 412.
- See also Lepkovsky, *S.*
- Evans, *J. C.* See Barrell, *H.*
- Evans, *J. E.*, desizing of silks and cottons, B., 945.
- Evans, *J. G.*, properties of surface-active substances [especially sulphonated fatty alcohols], B., 795.
- See also Imperial Chem. Industries.
- Evans, *J. M.* See Lazar, *A.*
- Evans, *J. W.* See Fetzer, *W. R.*
- Evans, *L. T.*, effects of pituitary implants and extracts on genital system of the lizard, A., 902. Effect of antuitrin-S on male lizard, *Anolis carolinensis*, A., 1171.
- Evans, *M. G.*, comparison of photosensitised reaction of hydrogen and oxygen, and deuterium and oxygen, A., 46.
- and Polanyi, *M.*, applications of transition state method to calculation of reaction velocities, especially in solution, A., 827.
- and Taylor, *H. S.*, kinetic expression for rate of photosensitised decomposition of ammonia and deuterammonia, A., 47.
- See also Evans, *A. G.*
- Evans, *O. B.*, and United Gas Improvement Co., gas and tar, (P.), B., 711.
- Evans, *Percy*, and Reid, *A.*, viscosity and thixotropy of drilling mud, B., 933.
- Evans, *Philip*. See Dickinson & Co., Ltd., J.
- Evans, *R. C.*, surface ionisation of potassium on molybdenum, A., 273.
- Evans, *R. D.*, radioactivity and the age of meteorites, A., 191. Apparatus for determination of minute quantities of radium, radon, and thoron in solids, liquids, and gases, A., 723. Age of the earth from radioactive disintegration and related problems, A., 1099. Ionisation currents produced by radon, Ra-*A*, and Ra-*C'* in cylindrical ionisation chambers, A., 1186.
- and Henderson, *M. C.*, failure to detect radioactivity in beryllium with the linear amplifier, A., 141.
- and Raitt, *R. W.*, radioactivity of the earth's crust and its influence on cosmic-ray electroscope observations made near ground level, A., 1185.
- and Williams, *H.*, radium content of lavas, California, A., 726.
- See also Finney, (*Mies*) *G. D.*

- Evans, R. E. See Gandrud, B. W.
 Evans, R. E. (Cambridge). See Woodman, H. E.
 Evans, R. N., and Davenport, J. E., analysis of combustibles in flue gas, B., 612.
 Evans, S. M. See Seever, M. H.
 Evans, T. See Shell Development Co.
 Evans, T. W., determination of tie lines in ternary systems without analyses for the components, A., 59. Evaluation of liquid-liquid heat exchangers, B., 1121.
 Evans, U. R. See Lewis, K. G., and Mears, R. B.
 Evans, W., Fink, G. J., Kern, H. A., and Nat. Aluminate Corp., composition for treating liquid contents of heating and cooling systems, (P.), B., 1074.
 Evans, W. A., jun. See Bryan, A. H.
 Evans, W. C., Ramage, G. R., and Simonson, J. L., caryophyllenes, I., A., 90.
 Evans, W. E., jun. See Krantz, J. C., jun.
 Evans, W. J., and Smiles, S., rearrangement of α -acetamidomulphones and -sulphides, A., 485. Derivatives of α -thiol-diphenylamine, A., 1511.
 Evans, W. L. See Kreider, L. C., and Swan, D. R.
 Evans, W. V., Lee, F. H., and Lee, C. H., decomposition voltage of Grignard reagents in ethereal solution, A., 566.
 Eveking, W. See Hess, K.
 Evenhuis, N. See Keuning, K. J.
 Eventova, M. S. See Zelinski, N. D.
 Everatt, R. W. See Imperial Chem. Industries.
 Everest, A. B., nickel alloys in [pulp and] paper-making industry, B., 446.
 Everett, C. E., and Massey-Harris Co., hammer mill, (P.), B., 178.
 Everett, J. G., trypanocidal activity and chemical constitution. IV. Derivatives of benzimidazole-5-arsinic acid, A., 502.
 Everett, M. R. See Edwards, B. G.
 Everhart, J. O., Rueckel, W. C., and Austin, C. R., barium hydroxide to prevent scumming of ceramic products, B., 850.
 Evers, C. P. See Tressler, D. K.
 Evers, F., regeneration of used machine oil, B., 212. Determination of fluorescence of mineral oils, B., 1032.
 See also Espe, W.
 Evers, N., and Smith, W., analytical classification of fish-liver oils. IV. and V., B., 194. Characters of halibut-liver oils, B., 560.
 Eversole, W. G., and Doughty, E. W., diffusion coefficients of molecules and ions from measurements of undisturbed diffusion in a stationary medium, A., 702.
 Everson, G. J., and Daniels, A. L., manganese retention in children, A., 654.
 See also Daniels, A. L.
 Everts, T. See Kessner.
 Evreinova, L. I., protecting air-dried raw hides against attack by moth and dermestids, B., 418.
 Evseev, I. D., critical periods in mineral nutrition of cultivated plants, B., 821.
 Evstropiev, K. S., and Suikovskaja, N. V., effect of composition of glass on interfacial potential: glass-aqueous solutions of electrolytes, A., 449.
 See also Nikolski, B. P.
 Ewan, T. See Imperial Chem. Industries.
 Ewart, A. J., influence of heavy water on plants, A., 795.
 Ewart, R. H. See Mooney, M.
 Ewell, A. W., decomposition of ozone, A., 39.
 Ewell, R. H., and Insley, H., hydrothermal synthesis of kaolinite, dickite, beidelite, and nontronite, A., 1333.
 See also Insley, H.
 Ewest, H. See Gen. Electric Co.
 Ewijk, L. J. G. van, penetration of steel by soft solder and other molten metals at temperatures up to 400°, B., 550. Properties of modern [photographic] emulsions in relation to their uses, B., 701.
 Ewing, D. T., electroplating of chromium, (P.), B., 506.
 Ewing, F. J., crystal structure of diaspor, A., 686. Crystal structure of lepidocrocite, A., 1061.
 Ewing, M. E. See Blatherwick, N. R.
 Ewing, P. L., effect of ultra-violet light on some sympathomimetic substances, A., 1173.
 Ewing, S., cathodic protection of pipe-lines from soil corrosion, B., 1048.
 Ewing, S. E. T., and Egan, A. L., dehumidification of compressed air, (P.), B., 1122.
 and Willey, J. L., apparatus for classifying or separating solid particles, (P.), B., 129.
 Ewing, S. P. See Denison, I. A.
 Exemplarsky, L. See Scherlin, S. M.
 Exline, P. G. See Koppers Co. of Delaware.
 Exlon Co. See Hauman, E. L.
 Exton, W. G., electro-optical measurement of concentrations, colours, dispersions, etc., of fluids and similar substances, (P.), B., 596.
 Eyerly, K., Oclassen, C., and Killian, J. A., nutritional value of bread in diet of human subjects and experimental animals, A., 1271.
 Eymann, C. See Koppers Co. of Delaware.
 Eyre, J. V., unicellular chemistry; part played by external influences in determining chemical character and biological behaviour of unicellular organisms, A., 534.
 Eyring, H., activated complex in chemical reactions, A., 586.
 and Gershinowitz, H., resolution of bond eigenfunctions in terms of a linearly independent set, A., 685.
 See also Bear, R. S., Gershinowitz, H., Sherman, A., and Wynne-Jones, W. F. K.
 Eyssartier, G. See Bichler, C. H.
 Eyton, B., printing ink, B., 684.
 Ezrielev, I. M., and Soloveitschik, L. S., determination of the formyl group in cellulose formate, B., 1135.
- F.**
- F. M., Ltd., and Chiverton, A. H., [patented cellulose acetate, etc.], films or foil, (P.), B., 98.
 Fabbricotti, G. F. See Baur, E.
 Fabbrini, V., decolorising power of aluminium hydroxide, B., 60.
 Faber, H. B. See McKee, R. H.
 Faber, L. De R., Carroll, G. J., and Faber Eng. Co., treatment of textile materials, etc., (P.), B., 19.
 Faber, O. M., determination of arsenic content of the air, A., 59.
 Faber, W. F., and Roadstrum, V. N., re-forming of light paraffin hydrocarbons, (P.), B., 295.
 Faber Engineering Co. See Faber L. De R.
 Faber Pencil Co., E. See Grossman, H.
 Fabian, A. A., Sachs, A., and Levine, V. E., comparison of wet and dry ashing methods for determination of blood-iron, A., 1001.
 See also Sachs, A.
 Fabian, F. W., use of honey in manufacture of fermented drinks, B., 1017.
 and Buskirk, H. H., *Aërobacter aerogenes* as cause of ropiness in maple syrup, B., 603.
 and Nienhuis, A. L., cucumber fermentation. VI. Formation of ropy brine in cucumber fermentation. VII. *Bacillus nigrificans* as cause of pickle blackening, B., 120.
 Fabianic, W. L., microscopical control of particle size in refractory manufacture, B., 356. Glasshouse superstructure materials, B., 767.
 Fabre, H., and Brémont, E., silicofluorides and wines, B., 330.
 Fabre, J. See Dalous, E.
 Fabre, P., inversion of solutions of sucrose in contact with regions traversed by an electric current, A., 1468. Displacement of ions in electrolytes during very short discharges employed in electrophysiology, A., 1535.
 Fabre, R., impregnation of the organism by dust, I., A., 1270.
 and Amy, L., determination of ultra-violet absorption, A., 1097.
 Fabrice Rinnite Industria Gomma Torino, and Maximoff, A. T., direct manufacture of rubber material from latex and similar aqueous dispersions, (P.), B., 776.
 Fabriques de Produits de Chimie Organique de Laire, and Armenault, R., plastic materials derived from urea and formaldehyde [containing sulphur], (P.), B., 111.
 Fabris, E. See Bovalini, E.
 Fabritziev, B., Buiko, G., and Pachomova, E., cements for joining leather to rubber, B., 862.
 Fabry, C., [effect of temperature of the stratosphere on spectrum of ozone], A., 561.
 Faerman, G. P. See Ljalikov, K. S.
 Faerman, S. See Tischtschenko, D. I.
 Faermann, L., viscosity of lubricants, B., 179.
 Faessler, A., and Küpferle, G., relative reflexion powers of X-ray spectrometer crystals, A., 284.
 Fagan, T. W., influence of nitrogen fertilisers on chemical composition of produce of individual grasses as pasture, hay, and aftermath, B., 117.
 and Davies, R. O., recovery of nitrogen in pastures from application of nitrogenous manures. III. Swords under the Warmbold system, B., 166.
 and Milton, W. E. J., effect of manures at different altitudes on nitrogen and mineral content of grass and clover species, B., 166.
 Fagersta Bruks Aktiebolaget, metals and alloys [chromium steels] containing low percentages of nitrogen, (P.), B., 155.
 Fagnat, M., photometric studies on multiplication of bacteria, A., 535.
 Fahlberg-List Akt.-Ges. Chemische Fabriken, and Memminger, K., agents for disinfecting seeds, (P.), B., 327.
 Fahlenbrach, H., artificial radioactivity, A., 803, 1297. Two new Curie-Joliot processes, A., 803.
 See also Cabrera, B.

- Fahrenwald, A. W., grinding [crushing] mill, (P.), B., 3.
- Fahrenwald, F. A., and Amer. Brake Shoe & Foundry Co., ductile cast iron [castings], (P.), B., 105. Brake shoes, (P.), B., 105.
- Faick, C. A., Young, J. C., Hubbard, D., and Finn, A. N., index of refraction, density, and thermal expansion of soda-alumina-silica glasses as functions of the composition, B., 767.
- Faillie, R., and Liberson, W., basal metabolism as a function of corpulence, A., 651.
- Fain, J. M., and Patent & Licensing Corp., aqueous emulsions, (P.), B., 387. Aqueous [bituminous] emulsions, (P.), B., 1033.
- Fainberg, P. B. See Komar, N. P.
- Faingar, M. M. See Nikiforov, L.
- Faingold, S. G. See Kopelevitch, G. V.
- Fainstein, S. S. See Frumin, L. M.
- Fair, F. See Raymond, G.
- Fair, G. M., trickling-filter fly (*Psychoda alternata*), B., 79.
- and Moore, E. W., effect of comminution of sewage solids on their subsequent digestion, B., 927.
- and Wells, W. F., air-dilution method of odour determination in water analysis, B., 127.
- Fairbairn, E. W. H. See Manson, W.
- Fairbrother, F., determination of dipole moments in solution, A., 13.
- and Stnbs, A. E., electro-endosmosis. VI. The "bubble-tube" method of measurement, A., 723.
- and Tuck, J. L., "electrodeless" metal vapour lamp for production of resonance radiation, A., 466.
- and Warhurst, E., velocity of reaction of sodium atoms with chloro-, bromo-, and iodo-benzene, A., 1082.
- See also Dakin, H. P.
- Fairbrother, J. A. V., clamping glass tubing, A., 723. High-temperature hydrogen furnace, A., 951.
- See also Brit. Thomson-Houston Co.
- Fairchild, D. H., Neeley, J. P., Patten, E. L., and Sprague, H. B., flotation apparatus, (P.), B., 1075.
- Fairley, A., Linton, E. C., and Wild, F. E., absorption of hydrocyanic acid vapour through the skin: acute cyanide poisoning, A., 657.
- Fairley, T. J., Frye, R., Hunter, W. J., and Hunter, M. P., reclaiming of rubber, (P.), B., 322.
- Hunter, W. J., and Hunter, M. P., plastic [solid oil or cement], (P.), B., 368. [Oleo-resinous] coating, (P.), B., 1103. Treatment of rubber [to produce a drying oil], (P.), B., 1155. [Varnish] gum [from rubber], (P.), B., 1155.
- Fairlie, A. M., sulphuric acid—to buy or to build? B., 99.
- Fairmount Glass Works. See Ferguson, J.
- Faitelberg, R. O., and Medvedev, B. M., velocity of resorption of alcohol in the "small stomach" (Pavlov), A., 1531.
- Fajans, E., hydrogen catalysis on nickel. I. Comparison of rates of para-hydrogen transformation and $H_2 + D_2 = 2HD$ on nickel. II. Sintering experiments, A., 710.
- Fajans, K., and Lühdemann, R., non-additivity of equivalent refraction of strong electrolytes at large concentrations, A., 932.
- Fakhoury, N. See Bangham, D. H.
- Fakidov, I., and Kikoin, I., change of resistance of liquid metals in a magnetic field, A., 1312.
- and Lasarev, B. G., Hall effect in solid gallium, A., 1310.
- Faktulin, K. N. See Antonov, L. I.
- Falconbridge Nikkelverk A/S., production of nickel by electrodeposition from nickel salts solutions, (P.), B., 315. Reduction of oxygenous nickel or nickel-copper compounds, (P.), B., 505. Electrolytically produced nickel plates for use as anodes in electrolytic plating baths, (P.), B., 506.
- Falconer, B., and Gladnikoff, H., alcohol content of blood of different vessels in the rabbit after its administration, A., 117.
- Faldini, M. See Internat. Latex Processes, and Soc. Ital. Pirelli.
- Falikevich, A. S., decomposition velocity of [calcium] carbide with water, A., 453.
- Falin, V. F. See Ivanov, K. I.
- Falinski, (Mle.) M., increase in rotatory power of mannitol in water by means of zirconium salts, A., 1072.
- Falk, K. G., mechanism of enzyme actions, A., 1023.
- and McGuire, G., enzyme action. XLIX. Lipase actions of tissues of rachitic rats, A., 403.
- Falkenhagen, H., and Bachem, C., compressibility of electrolytic solutions, A., 820. Compressibility of strong electrolytes, A., 1201.
- Falkenhausen, F. von, micro-determination of carbonyl groups, A., 228.
- See also Flaschenträger, B.
- Falkovskaja, A. See Stadnikov, G. L.
- Fallah, R., Hunter, T. G., and Nash, A. W., application of physico-chemical principles to design of liquid-liquid contact equipment. III. and IV., B., 82, 337.
- Fallon, F. F., ceramic bodies containing talc, B., 804.
- Fallon, J., gas-producer machines or units for supplying heating gas to metallurgical and similar furnaces, (P.), B., 792.
- Faltin, E. See Groh, C.
- Fan, F. M. See Tseng, C. L.
- Fancher, G. H. See Nelson, Wilbur L.
- Fang, H. Y. See Kao, C. H., and Sah, P. P. T.
- Fankuchen, I., crystal structure of sodium uranyl acetate, A., 17. X-Ray patterns of crystalline urease and pepsin, A., 18. Crystal structure of potassium uranyl acetate, A., 152. Crystal structure of ammonium uranyl acetate, A., 1450.
- Fansteel Products Co., Inc., hard [tantalum carbide] alloys, (P.), B., 362. Hard-metal alloys [containing tungsten carbide], (P.), B., 810.
- See also Anselm, A. J., and Engle, E. W.
- Fantz, F. C., return bend for cracking coils in oil stills, (P.), B., 217.
- Faranacci, N. See Smith, H. W.
- Farastan Co. See Ebert, Joseph.
- Farb- & Gerbstoffwerke C. Fleisch, jun., high-molecular acetals [textile assistants], (P.), B., 442. Sulphonic acids, (P.), B., 487.
- Farber, L., applications of pervaporation, A., 1219.
- Farberov, M. See Merzlikin, F.
- Farden, C. A. See Abel, F. A. E., and Magistad, O. C.
- Fargo, J. M., Bohstedt, G., Hart, E. B., and Phillips, P. H., rock phosphate as mineral feed for swine, A., 654.
- Farini, P. See Toni, G.
- Faris, B. F. See Small, L.
- Farkas, A., and Farkas, L., exchange reactions between heavy hydrogen and hydrogen adsorbed in solids, A., 710.
- See also Farkas, L.
- Farkas, L., and Farkas, A., equilibrium $H_2O + HH^2 = HH^2O + H_2$, A., 33. Ratio of the magnetic moment of the proton to the magnetic moment of the deuteron, A., 560.
- and Levy, S., measurement of intensity distribution and width of predissociation lines of the AlH molecule, A., 427.
- and Sachsse, H., recombination of hydrogen atoms, and their reaction with oxygen and carbon monoxide, A., 39.
- See also Farkas, A.
- Farley, G. H., use of pure vanilla extract [in ice cream], B., 1161.
- Farley, V. See Rathery, F.
- Farlow, M., Burdick, H. E., and Adkins, H., structure of [the compound] $C_7H_{12}O_2$ from hydrogenation of furyl-acetaldehyde, A., 90.
- See also Adkins, H.
- Farmer, E. H., and Hughes, L. A., catalytic hydrogenation of unsaturated compounds. III. Selectivity of attack in relation to nature of the catalyst, A., 175. Muconic and hydromuconic acids. VI. *cis*- and *trans*- Δ^2 -Dihydromuconic acids, A., 196.
- and Sunderland, E., unsaturated acids of natural oils. II. Highly unsaturated acids of the kernels of *Parinarium laurinum*, A., 1041.
- See also Bloomfield, G. F., Brown, W. B., and Rubber Producers' Res. Assoc.
- Farmer, L., and Wynne, A. M., pancreatic proteinase. I. and II. Effects of various compounds on activity of the enzyme, A., 1417.
- Farmer, R. O. See Clapp, L. R.
- Farnham, G. S. See O'Neill, H.
- Farooq, M. O., and Hunter, R. F., directive effect of cyano- and iodo-substituents on thiazole cyclisation of *pp*-disubstituted thiocarbanilides by bromine, A., 364.
- Farquharson, J., and Heymann, E., magnetic properties of solutions of cadmium in molten cadmium chloride and of molten calomel, A., 1063.
- Farr, K. R. See De Groot, M.
- Farr, S. M., and Brook Hill Farm, Inc., production of *acidophilus* product, (P.), B., 1113.
- Farr, W. K., formation and structure of cellulose membranes, A., 1541.
- and Sisson, W. A., X-ray diffraction patterns of cellulose particles and interpretation of cellulose diffraction data, A., 18.
- Farrant, J. C. See Internat. Combustion, Ltd.
- Farrar, G. E. See Sturgis, C. C.
- Farrar, G. E., jun., determination of iron in biological materials, A., 1436.
- Farrar, M. D., and Kelley, V. W., accumulative effect of oil sprays on apple trees, B., 969.
- See also Flint, W. P.
- Farrel, M. A., respiratory mechanism of the *Streptococci*, A., 1168.

- Farrell, E., dye and similar vats [with automatic roller-reversing mechanism], (P.), B., 990.
- Farrell, J. K., and Bachman, G. B., dehalogenation of $\alpha\beta$ -dibromo-acids. II. Influence of acid structure on yields of bromo-olefines, A., 1105.
- Farrer, W. G. See Davis, C.
- Farrington, F. See Bleachers' Assoc., Ltd.
- Farris, N. F. See Sprague, H. B.
- Farrow, E. S. See Eastman Kodak Co.
- Farski, B., [changes during firing of] clay, B., 453.
- Farthing, J. W., and Beck, J. S. P., urobilinuria: false Ehrlich reaction caused by pyridium medication, A., 1156.
- Farwell, H. W., and Hawkes, J. B., time lags in magneto-optics, A., 283.
- Fasce, E. V. See Norris, J. F.
- Faserstoff-Analysenkommitté des Vereins der Zellstoff- & Papier-Chemiker & Ingenieure, standard methods for determination of α -, β -, γ -, and total alkalisoluble cellulose, B., 142. Standard method for determining the copper number of pulps, B., 142. Standard methods for determining the alcohol extract [of pulp] and the resolution of resin extracts into unsaponifiable matter, fatty and resin acids, B., 184. Standard methods for determining wood gum and pentosan in chemical pulp, B., 719.
- Fashena, G. J. See Trevor, V.
- Fasold, H., blood-iodine of rachitic infants, A., 518. Lipin increase after large doses of vitamin-A, A., 668.
- Fasoli, G., artificial masses resembling wood, (P.), B., 457.
- Fassnacht, H. H. See Du Pont de Nemours & Co., E. I.
- Fassnacht, R. C. See Braun, G.
- Fassotte, P. C., calcination of silicious products, (P.), B., 454.
- Fasting, J. S., rotary kiln plants for manufacture of cement, (P.), B., 950. Rotary kiln plant, (P.), B., 1025.
- Fastré, P. See Ortel, J.
- Faterson, (Miss) A., re-emission in fluorescence bands of mercury vapour, A., 138.
- Fatome, M. See Fleury, P.
- Fattinger, F., radioactive threads, (P.), B., 766.
- Faucett, P. H., durability of nitrocellulose lacquer films, B., 319. Paste wax floor polishes, B., 365. Spirit-proof finishes, B., 465. Leaking of aluminium paint, B., 598. [Lacquer] thinner production, B., 598. Causes of [poor] flow in clear and pigmented lacquers, B., 734.
- Faure, A., and Pallu, R., determination of coloration of liquids; wines, B., 330.
- Faure, M. See Machebœuf, M. A.
- Fausser, G., resistance to corrosion by nitric acid of oxyacetylene welds in stainless steels, B., 594.
- Faust, C. L., and Montillon, G. H., electrodeposition of copper-nickel-zinc alloys from cyanide solutions. II., B., 554.
- Faust, W. See Aberhalden, E.
- Fauveau, and Le Paire, influence of fireproofing salts on composition of gas from combustion of [ballistic] powder, B., 831.
- Favarger, P. See Briner, E.
- Favier, R. See Policard, A. A.
- Favorskaja, (Mlle.) T. See Favorski, A. E.
- Favorski, A. E., and Favorskaja, (Mlle.) T., controlled acetylene-allylene-diene molecular changes of the halogenohydrins, A., 605.
- Favorski, A. E., and Temnikova, (Mme.) T. I., inter-relationship of acetylphenylcarbinol and benzoylmethylcarbinol: new type of tautomerism, A., 622.
- Favorski, M., Tchitchonkin, M., and Ivanov, I., molecular changes of a-dissecondary oxides of the aliphatic series, and of normal structure, A., 194.
- Fawcett, E. W. See Gibson, R. O., and Imperial Chem. Industries.
- Fawcett, G. S., colorimetry in industry, B., 433. Recommended standard procedure for measuring colour of oils, B., 774.
- Fawcett, Preston & Co., Ltd., Macgillivray, J. C., and Chapman, G., [springs for rollers of] sugar-cane or other rolling mills, (P.), B., 834.
- Fay, A. C., detection of formaldehyde in milk by the methylene-blue reduction test, B., 874.
- Caulfield, W. J., and Riddell, W. H., germicidal efficiency of lye and chlorine solutions for sterilising milk machines and cream separators, B., 873.
- Fay, C. H., refinement of the Heisenberg theory of ferromagnetism applicable to simple cubic crystals, A., 1452.
- Fay, J. W. J. See Paneth, F. A.
- Fay, K. See Leonhardt, H.
- Fay, M., and Wharton, P. S., galactose in the thoracic lymph of the dog, A., 883.
- Fays, R. See Alsa Soc. Anon.
- Fazikas, J. F. See Himwich, H. E.
- Fea, J. E., sizing of rayon, B., 989.
- Feagles, R. L., preventing deterioration of milk, cream, or other dairy products, (P.), B., 972.
- Feather, N. See Chadwick, J.
- Feben, D., nitrifying bacteria in water supplies, B., 527.
- Fedenev, N., photo-electric effect in a layer of silver deposited on nickel, A., 1191.
- Feder, E. A. See Schujkin, N. I.
- Federal Foundry Supply Co. See Heyl, L. H.
- Federitenko, A. See Prichotko, A.
- Fedorov, A. S., rule to demonstrate migration of ions, A., 466.
- Fedorov, B. P., and Semenov, P. A., ethylene from gaseous carbonisation products from peat and from cracked tar, B., 6.
- Smirnova, A. I., and Semenov, P. A., butadiene from ψ -butylene (butene), A., 324.
- and Spriskov, A. A., colour reactions and spectrophotometric determination of nitronaphthalenes, A., 1116; B., 617. Analysis of technical 1-nitronaphthalene, B., 297. Quantitative examination of technical α -nitronaphthalene, B., 1084.
- Fedorov, K. V. See Davidson, N. N.
- Fedorova, A. N. See Karpov, B. G.
- Fedoteev, N., cryolite from superphosphate industry waste products, B., 723.
- and Kinkulski, R., electrodeposition of nickel from nickel chloride solutions, B., 1147.
- Fedoteev, P. P., theory of electrolysis of cryolite-alumina melts, B., 65.
- and Tschishik, A. A., aluminium chloride from the oxide, B., 848.
- Feenberg, E., Born-Infeld field theory of the electron, A., 278. Neutron-proton interaction. I. Binding energies of the hydrogen and helium isotopes. II. Scattering of neutrons by protons, A., 911.
- Fehder, P. See Husa, W. J.
- Fehér, D., clearing of forests, B., 72. Potassium and phosphorus content of sandy soils of Hungarian lowlands, with special reference to improving productivity, B., 324. Periodic cycle of phosphorus in forest soils, B., 372. Variations in soil reaction, B., 513. Value of plant associations of sandy soils in characterising the soils, B., 1108.
- Féher, F. See Simon, Arthur.
- Fehland, P. R., and Adkins, H., replacement series of the alkyl groups as determined by alcoholysis of esters, A., 472.
- Fehling, R. See Rosin, P.
- Fehre, W., and Audouy, M., cleaning and bleaching of crude cotton with hydrogen peroxide for production of hydrophilic cotton wool without heating under pressure, B., 224.
- Feigin, D., and Shilianski, Z., determination of fat in finished chrome-tanned goods, B., 916.
- Feigl, F., therapeutically and disinfectantly active substances [containing silver], (P.), B., 524.
- Anger, V., and Frehden, O., detection of organic compounds by means of drop reactions. VII., A., 507.
- and Frehden, O., detection of organic compounds by means of drop reactions. X., A., 1483.
- and Krumholz, P., detection and determination of copper in pharmaceutical preparations, B., 45.
- and Leitmeier, H., [detection of sulphurous acid and its salts and of tin], A., 462.
- and Rajmann, E., use of induced precipitation for detection of small amounts of titanium and zirconium, A., 1474.
- Zappert, R., and Vázquez, S., detection of organic compounds by means of drop reactions. IX. Detection of acetic acid and methyl ketones by formation of indigotin, A., 877.
- Feigman, V. G. See Sinitzin, N. I.
- Feinschmidt, O. See Ferdmann, D.
- Feist, F., substitution-syntheses of mellitic acid and replaceability of chlorine in the benzene nucleus, A., 1497.
- Feist, K., Awe, W., and Etzrodt, H., alkaloids of calumba root. V. Absorption spectra of alkaloids of calumba root and of derivatives of berberine, A., 99.
- Kuntz, E., and Brachvogel, R., bitter principles of calumba root. II., A., 1245.
- Rintelen, P., and Kuntz, E., bitter principles of calumba root. I., A., 864.
- and Schultz, J., 2-aminopyridine series. II. Action of phthalic anhydride and salicyloyl chloride on 2-aminopyridine, A., 92.
- Feitknecht, W., basic salts. VIII. Chemistry and morphology of basic salts of bivalent metals, A., 461.
- and Fischer, G., basic salts. IX. Basic cobalt sulphates. X. Chemistry and morphology of basic salts of bivalent metals. III. Basic cobalt chlorides, A., 461, 716.
- Feix, R., softened cheese, (P.), B., 477.
- and Pomosin Werke G.m.b.H., cheese, (P.), B., 173.
- and Scheinberger, E., hardening of steel and alloy steels, (P.), B., 155.
- See also Plawenn, A. von.

- Fejér, G. See Sängér, R.
- Feldberg, W., and Gaddum, J. H., chemical transmitter at synapses in a sympathetic ganglion, A., 244.
- and Kwiakowski, H., appearance of an acetylcholine-like substance in perfusion-liquid from perfusion of the isolated small intestine of the cat, A., 244.
- See also Dale, (Sir) H. H.
- Feldman, J. See Swann, S., jun.
- Feldman, O. S., and Enoshevskaja, K. K., *Nicotiana rustica*, B., 1164.
- Feldman, P. See Böhm, J.
- Feldman, S. See Urban, F.
- Feldmann, R. W., determination of caesium as caesium bismuth iodide, A., 1215.
- Feldmühle Akt.-Ges., dulled filaments, films, and similar artificial products of viscose, (P.), B., 588. Machines for spinning and after-treating artificial silk, (P.), B., 669.
- Felix, A., Bhatnagar, S. S., and Pitt, R. M., properties of viantigen of *Eberthella typhi*, A., 1420.
- Fell, E. W., Pöbert effect in iron and soft steel, B., 1046.
- Fell, H. B., and Robison, R., development of calcifying mechanism in avian cartilage and osteoid tissue, A., 393.
- Fellenberg, T. von, determination of glucose in presence of disaccharides with Barfoed's reagent, A., 1484. Analysis of pastry: determination of fat by the acid method, B., 570. [Rapid] test for absence of arsenic, A., 596.
- and Demont, P., test of von Fellenberg's titrimetric method for determination of sugar, A., 1484.
- Feller, E. See Mecheels, O.
- Fellows, C. H., feed-water treatment for small boilers, B., 209.
- Felsner, A. See Morgan, A. F.
- Felsing, W. A., and Ashby, C. T., adsorption of methylamine on silica gel, alumina gel, and charcoal; heats of adsorption of ammonia and the methylamines on silica gel, A., 29.
- Shofner, L., and Garlock, N. B., physical constants of methyl ethyl ketone and an investigation of its additive compound with sodium iodide dihydrate, A., 22.
- Feltham, C. B. See Zobell, C. E.
- Felthouse, E., dyeing of wool and cotton union linings, B., 988.
- Felton, G. E., and Freudenberg, W., degradation of l-arabinal to l-erythrose, A., 1354.
- Felton, L. D., immunising substances in *Pneumococci*. II. Separation of the organism into acid-soluble and -insoluble fractions, A., 1168.
- Kauffmann, G., and Stahl, H. J., precipitation of bacterial polysaccharides with calcium phosphate; *Pneumococcus*, A., 664.
- Fendius, H. See Endell, K.
- Feniksova, R. V. See Blagoveschenski, A. V.
- Fenn, H. N. See Bass, S. L.
- Fenn, W. O., an oxidative reserve as source of anaerobic carbon dioxide in heart-muscle, A., 890.
- Cobb, D. M., and Marsh, B. S., sodium and chloride in frog muscle, A., 772.
- Fenner, G. P. See Tullis, D. R.
- Fenglio, M., zaraitite: synthetic zaraitite, A., 1479.
- Fenske, M. R., Tongberg, C. O., and Quiggle, D., packing materials for [laboratory] fractionating columns, A., 59.
- See also Dow, R. B., McCluer, W. B., Quiggle, D., and Tongberg, C. O.
- Fentress, J. H., and Rubber Service Labs. Co., vulcanisation of rubber and product obtained thereby, (P.), B., 370.
- Fenwick, F., protective films on ferrous alloys; influence of chloride ion on electromotive behaviour, B., 952.
- See also Shenk, W. E.
- Feodosiev, N. N. See Popov, M. M.
- Ferdmann, D., Feinschmidt, O., and Dmitrenko, M., transformations of adenosinetriphosphoric acid in muscle. I. Dephosphorylation during muscular activity, A., 778.
- and Galperin, L., transformations of the nucleotides in heart muscle. I., A., 778.
- Fereday, R. A., and Wiersma, E. C., determination of the difference of the principal susceptibilities of some rare-earth ethyl sulphates, A., 924.
- Feremutsch, P., and Vieli, O., sterilisation of liquids, especially milk, (P.), B., 958.
- Fergus, E. N., place of legumes in pasture production, B., 919.
- Ferguson, A., and Kennedy, S. J., approximate determination of the critical constants of unassociated substances, A., 1064.
- Ferguson, A. L., Case, L. O., and Evans, G. H., dielectric constant. V. Anomalous dispersion of lecithin in viscous mineral oils, A., 809.
- and Chen, G. M., overvoltage. VII. Electrode discharge phenomena studied by means of an electromagnetic interrupter together with an oscillograph. VIII. Overvoltage at bright platinum electrodes in 2N-H₂SO₄ for low e.d. determined with an oscillograph, A., 171, 707.
- Ferguson, G. W. See Barrow, F.
- Ferguson, J., and Fairmount Glass Works, heating of glass furnace forehearths, (P.), B., 804.
- Ferguson, J. H., and Smith, E. R. B., effects of acetyl-β-methylcholine on gastric acidity of monkeys, A., 1411.
- Ferguson, J. K. W., and Roughton, F. J. W., direct chemical determination of "carbamino-bound" carbon dioxide in haemoglobin solution, A., 102. Direct determination of carbamino-compounds of carbon dioxide with haemoglobin, A., 770. Chemical relationships and physiological importance of carbamino-compounds of carbon dioxide with haemoglobin, A., 770.
- Ferguson, J. M., the basic open-hearth process, B., 409.
- Ferguson, L. See Schumacher, E. E.
- Ferguson, M. C., and Hunt, B., origin and distribution of colour in anther and pollen of petunia, A., 551.
- Ferguson, T. G., and Hovey, B. H., apparatus for filtering liquids, particularly lubricating oil, (P.), B., 50.
- Ferguson, W. S., curves for use in colorimetric determination of carotene, A., 1487.
- Ferguson Battery Co., Ltd., Boyes, J. R., Sulman, E. H., and Russell, N. W., [carbon] electrodes for [primary] electric cells, (P.), B., 812.
- Ferkel, K. A., metal oxides, (P.), B., 1092.
- Fermi, E., pressure displacement of higher lines of spectral series, A., 136. Radioactivity produced by neutron bombardment, A., 803.
- and Uhlenbeck, G. E., recombination of electrons and positrons, A., 139.
- See also Amaldi, E.
- Fernández, O., and De Mingo, M., determination of pentosans in foodstuffs, B., 604.
- Fernández-Ladreda, J. M., [protection from] corrosion of aluminium, B., 361.
- Fernelius, W. C., and Robey, R. F., nature of the metallic state, A., 435.
- See also Dermer, O. C., McCleary, R. L., and Watt, G. W.
- Fernholz, E., synthesis of the corpus luteum hormone, A., 128. Constitution of the hydroxyketone, C₂₇H₄₆O₂, from corpus luteum, A., 216. Preparation of the corpus luteum hormone from stigmasterol, A., 260. Behaviour of sterol derivatives towards digitonin, A., 616. Isolation of 3-hydroxy-6-ketoallocholanolic acid from pig's bile, A., 773. Degradation of sitostanol acetate by chromic acid, A., 1120.
- and Chakravorty, P. N., position of hydroxyl group in ergosterol and stigmasterol, A., 210. Isolation of androstanone from neutral products of oxidation of cholestane, A., 542.
- See also Wallis, E. S.
- Ferrand, F., artificial [staple] fibres, (P.), B., 1138.
- Ferrand, L., furnaces for electrolysis by the fusion process and for electrometallurgy, (P.), B., 1053. Electrolytic cells for production of aluminium, B., 1147.
- Ferrannini, A., effect of parathyroid extract on normal carbohydrate metabolism, A., 1285.
- Ferrari, A., and Colla, C., mixed nickel nitrites of univalent and bivalent metals. I., A., 717.
- and Curti, R., lead thioarsenites, A., 601.
- See also Bruni, G.
- Ferrari, C. See Cecconi, R.
- Ferrari, J. See Sordelli, A.
- Ferré, L., and Archinard, P., determination of volatile acidity of wines, B., 330.
- Ferreira, B. F., and Wheeler, T. S., inhibition in the benzoin reaction, A., 1329.
- Ferrey, G. J. W., determination of phosphorus in phosphate, hypophosphite, and glycerophosphate syrups, B., 252.
- Ferri, C. See Meyer, K. H.
- Ferrieh, M., separation of iron and aluminium from alkaline-earth elements by means of ammonia, A., 1216.
- Ferrin, E. F., and Johnson, D., soya beans in relation to soft pork, B., 972.
- Ferris, S. W., and Atlantic Refining Co., electrical insulating oil, (P.), B., 760.
- Ferro Engineering Co. See Ward, P. R.
- Ferro-Luzzi, G., "true creatinine" of blood, A., 373.
- Fershtand, J. A. B. See Sullivan, M.
- Fersman, A. E., EK [energy coefficient] system, A., 1305.
- Fesser, H. See Matossi, F.
- Fessler, J. See Mrak, E.
- Fester, G. A., and Cruellas, J., origin of petroleum, A., 469.
- Fetzer, W. R., and Evans, J. W., Baum-purity-moisture tables for corn syrup, B., 283.
- Feuer, E. See Kemp, P.

- Feuerstein, K., synthesis of dimethoxycinnamaldehydes, A., 1123.
- Feulgen, R., and Behrens, M., mill for fine grinding of difficult (especially plant) materials, A., 554.
- Feussner, O., noble metals and their alloys, B., 552.
- Fevold, H. L., and Hisaw, F. L., interactions of gonad-stimulating hormones in ovarian development, A., 412.
- Feyder, S., fat formation from sucrose and glucose, A., 1273.
- and Pierce, H. B., rates of absorption of and glycogenesis from various sugars, A., 1273.
- Feyte, A., nitrogenous matter of wheat and flour, B., 745.
- Ffolliott, C. F. See Crawford, F. H.
- Fialkov, J. A., and Schargorodski, S. D., argentometric determination of formaldehyde, A., 1353.
- See also Plotnikov, V. A.
- Fiandaca, S., determination of lipin-phosphorus in blood, A., 509.
- and Capizzi, J., action of adrenal cortex extract, A., 665.
- Fiberloft Corporation. See Esselen, G. J., Gress, G. C., and Wallace, G. L.
- Ficai, C., electrical distillation of coal, B., 834.
- Fichter, F., electrolytic syntheses in organic chemistry, A., 324.
- and Buess, H., peroxide from methyl hydrogen adipate and proof of its formation during electrolysis, A., 607.
- Action of nitric acid on dipropionyl peroxide, A., 730.
- and Heer, J., oxidation of ethyl hydrogen malonate by potassium persulphate, A., 731.
- Oxidation of ethyl hydrogen dimethylmalonate with potassium persulphate, A., 1351.
- and Metz, F., electrolysis of nitrate-acetate mixtures, A., 1105.
- and Müller, O., electrochemical oxidation of benzene homologues. VI. Mesitylene, A., 1229.
- and Rosenzweig, J., electrolysis of crotonic acid and thermal decomposition of diacetyl peroxide, A., 327.
- and Siegrist, W. [with Buess, H.], electrolysis of mixtures of propionates and nitrates, A., 472.
- Fichtmueller, J., electrolytic production of embossing foils of gold or other metal or of different metals, (P.), B., 236.
- Fickensher, J. W., calculation of mixtures of oleum and sulphuric acid, B., 492.
- Ficklen, J. B., simple glass connexion, A., 599.
- See also Cook, W. A., Hough, W. A., Newell, I. L., Ott, L. H., and Pike, N. R.
- Fidelity Trust Co. See Koppers Co. of Delaware.
- Fidler, R. S., colorimetric determination of blood-cholesterol, A., 1392.
- Fiedler, F. P. See Selden Co.
- Fiedziuszko, J., and Suszko, J., spatial rearrangement of quinine alkaloids to *epi*-bases, A., 765.
- Fieger, E. A., and Sturgis, M. B., profile studies of coastal prairie soils of Louisiana. I. Exchange and solution properties, B., 36.
- Fiek, G. See Sieglerschmidt, H.
- Field, A. See Morgan, A. F.
- Field, A. E., production of negatives with photographic images thereon of enhanced quality, (P.), B., 830.
- Field, A. W., and Bird & Sons, Ltd., A., concentrated table-jelly tablets, (P.), B., 973.
- Field, C., economical use of mercury and other liquids [in boilers], (P.), B., 531.
- and Chem. Machinery Corp., apparatus for heating and cooling at high temperatures, (P.), B., 531.
- Field, J., jun., and Martin, A. W., action of 2:4-dinitrophenol on washed yeast, A., 1027.
- Martin, A. W., and Field, S. M., action of 2:6- and 2:5-dinitrophenol and of the mononitrophenols on yeast respiration, A., 661.
- Effects of 2:4-dinitrophenol on respiration of commercial cake yeast, A., 1539.
- Field, M. E., Leigh, O. C., jun., Heim, J. W., and Drinker, C. K., protein content and osmotic pressure of blood-serum and lymph from various sources in the dog, A., 508.
- Field, R. M., microbiology and marine limestone, A., 322.
- Field, S., electrochemistry applied to electrodeposition. IV. Ostwald's law of dilution, B., 857.
- Field, S. M. See Field, J., jun.
- Field, T. E., effect of pressure on dissociation of a solid, A., 168.
- Field & Co., M. See under Marshall Field & Co.
- Fielding, W. L., and Rose, M. F., report of cotton experiment station, Barberton, S. Africa; rotation crops, B., 919.
- Fieldner, A. C., Davis, J. D., Thiessen, R., Kester, E. B., Selvig, W. A., Reynolds, D. A., Jung, F. W., and Sprunk, G. C., carbonising properties and constitution of Alma bed coal from Spruce River No. 4 mine, Boone County, W. Va., B., 834.
- Fields, J. D., refining of hydrocarbons, (P.), B., 260.
- Refining of petroleum oil distillates, (P.), B., 1083.
- Fierz-David, H. E., preparation of ethyl-*o*-toluidine, A., 1118.
- [with Bernasconi, E., Keller, E., Vannotti, F., Zürcher, H., Geering, R., and Koch, J.], chemistry of blue, green, and yellow sulphur dyes, A., 504.
- and Rufener, J. P., monoethyl-*o*-toluidine and rhodamines obtained therefrom, A., 206.
- Fieschi, A., isolation of an unsaponifiable substance from the spleen in a case of Werloff's disease, A., 1150.
- Fieser, L. F., methylcholanthrene, A., 1117.
- and Fieser, (Mrs.) M., reduction potentials of naphthoquinones, A., 585.
- 1:2-Benzpyrene, A., 741.
- Diene synthesis of anthraquinones, A., 1372.
- and Hartwell, J. L., tautomerism between diphenylmethyl-1:2-naphthoquinone and hydroxy- α -naphthofuchsone, A., 1243.
- Action of diazomethane derivatives and of azides on 1:4- and 1:2-naphthoquinones, A., 1243.
- Reaction of hydrazoic acid with naphthoquinones, A., 1243.
- and Hershberg, E. B., phenanthrene synthesis, A., 1358.
- 1:9-Methylene-1:2:5:6-dibenzanthracene, A., 1359.
- Synthesis of phenanthrene and hydrophenanthrene derivatives. I. Bougault reaction, A., 1495.
- Hershberg, E. B., and Newman, M. S., 4'-hydroxy-1:2-benzpyrene, A., 1233.
- and Kennelly, R. G., comparison of heterocyclic systems with benzene. IV. Thionaphthenquinones, A., 1377.
- Fieser, L. F., and Lothrop, W. C., structure of naphthalene, A., 1230.
- and Martin, Elmore L., comparison of heterocyclic ring systems with benzene. V. Benztriazole (azimidobenzene) series. VI. Quinones of the quinoline and isoquinoline series. VII. Isologues of anthraquinone containing one and two triazole rings, A., 1508.
- and Newman, M. S., methylcholanthrene from cholic acid, A., 859.
- Cholic acids of certain carcinogenic hydrocarbons, A., 1366.
- and Seligman, A. M., additive reactions of alkylated naphthoquinones, A., 216.
- Synthesis of methylcholanthrene, A., 480.
- Synthesis of methylcholanthrene, A., 853.
- 16:20-Dimethylcholanthrene, A., 1117.
- Condensation of dienes with alkylated quinones, A., 1372.
- Fieser, (Mrs.) M. See Fieser, L. F.
- Fiessinger, N., Bénard, H., and Syllaba, G., oxygen consumption in perfused dog's liver, A., 890.
- and Biron, A., blood-sugar curves after intravenous injection of hypertonic glucose, A., 1000.
- Fife, H. R. See Carbide & Carbon Chemicals Corp.
- Fife, J. M., and Frampton, V. L., effect of carbon dioxide on the *pH* and certain nitrogen fractions of the sugar-beet plant, A., 905.
- Fifield, C. C. See Weaver, R.
- Figg, L. J., jun. See Eastman Kodak Co.
- Fikentscher, R., and Franke, K., clinical porphyrin investigations, their quantitative and qualitative technique, A., 769.
- Filby, E., and Maass, O., sorption of water vapour on cellulosic materials, A., 1315.
- Filden, P. See Slatineanu, A.
- Filepowicz, W. See Biluchowski, Z. Z.
- Filimon, C. See Steopoe, A.
- Filinov, F. See Salkind, J. S.
- Filipello, F., analysis of imported wines, B., 121.
- and Marsh, G. L., honey wine, B., 76.
- See also Turbovsky, M. W.
- Filipovitch, I. V., changes in gasoline extract from stump tar, B., 1029.
- Extraction of rosin [from wood chips] with organic solvents, B., 1055.
- Tuchovitzki, N. V., and Sorokin, M. M., influence of organic solvents on extraction of rosin from stump tar, B., 1029.
- Filipovitch, L. V., and Kapustina, V. I., widening the scope of raw products suitable for the preparation of camphor, B., 1036.
- Filipowicz, B. See Przylecki, S. J. von.
- Filippitschev, S. F., and Tschekalin, M. A., preparation of anil-black E. II, B., 94.
- Substitution of diazo-compounds in azo-dyes, B., 1037.
- Filippo, J. D., reductase-time of milk and the bacterial content, A., 1524.
- Determination of common salt in foodstuffs, B., 1116.
- Filippov, A. N. See Ratzbaum, E. A., Sedov, J. S., Tolmatshev, J. M., and Zvjagintzev, O. E.
- Filippova, N. S., isotope ratio in petroleum, A., 843.
- Filitti, (Mlle.) S., oxidation-reduction potentials of hypoxanthine \rightleftharpoons xanthine and xanthine \rightleftharpoons uric acid, A., 170.
- Oxidation-reduction equilibria of oxypurines, A., 450.

- Filitti, (*Mlle.*) S. See also Wurmser, R.
- Fillinger, J., centrifugal filter or separator with continuous charge and discharge at full speed, (P.), B., 481.
- Filonenko, N. E. See Beliankin, D. S.
- Filosofov, A. V., determination of titre of permanganate solutions by means of calcium carbonate, A., 318. Determination of lime in limestone and raw cement by means of permanganate, B., 99. Glinit cement containing unslaked lime, B., 308. Action of *N*-hydrochloric acid on set glinit cement, B., 308.
- Filtration Equipment Corporation. See Laughlin, W. C.
- Filtrol Co. of California. See Belden, D. S.
- Finálý, I. von, utility of the *Aspergillus* method [for soil-nutrient values], B., 1157.
- Finch, A. H., physiology of apple varieties, A., 904.
See also Kinnison, A. F.
- Finch, G. B., Davison, J. W., and Jones, R. D., refining apparatus for hydrocarbons, (P.), B., 893.
- Finch, G. I., cathodic combustion of hydrogen and carbon monoxide, A., 310.
and Quarrell, A. G., "extra" rings and bands in electron diffraction patterns, A., 287, 1452.
- Quarrell, A. G., and Wilman, H., electron diffraction and surface structure, A., 1308.
- Finch, W. G., and Kold-Hold Manufg. Co., brine solution, (P.), B., 543.
- Finck, J. L., apparatus for measuring thermal conductivity of refractories at high temperatures, B., 356.
- Fincke, H., determination of fat in cacao beans, B., 122.
- Fincke, M. L., and Sherman, H. C., availability of calcium from some typical foods, A., 1154.
- Findlay, W. P. K., standard laboratory test for wood preservatives, B., 994.
- Findley, J. K. See Wills, W. H.
- Findley, T. See Westfall, B. B.
- Fine, J., biuret method of determining albumin and globulin in serum and urine, A., 508.
- Fine, R. L., advanced uses of rubber in paints, B., 959.
- Fingas, E. See Kröger, C.
- Fingerling, G., starch equivalent of beet, B., 78.
and Ebert, E., fermentation losses in the hydrochloric acid-sugar process compared with the sugar and ordinary processes of ensilage, B., 699.
- Hientzsch, B., and Schmidt, K., starch equivalent of maize silage, B., 971.
- Strigel, A., and Ebert, E., nutrient losses due to drainage [in silage], B., 699.
- Fink, A., and Gross, P., micro-cell for the measurement of electrolytic conductivities, A., 1476.
- Gross, P., and Steiner, H., conductivity of strong acids in mixtures of light and heavy water, A., 1324.
See also Baroni, E.
- Fink, C. G., aluminium-coated metal [iron], (P.), B., 157.
and Deren, P., rhenium plating, B., 233.
- Eldridge, C. H., and United Chromium, Inc., electrodeposition of chromium, (P.), B., 107.
- Fink, C. G., and Kenny, F. J., treatment of metal and alloy articles [*e.g.*, stainless steel] to improve resistivity to corrosion, (P.), B., 907.
and Young, C. B. F., cadmium-zinc alloy plating from acid sulphate solutions, B., 555.
- Fink, C. K. See Lutz, R. E.
- Fink, D. S., soil factors which prevent toxicity of calcium cyanamide, B., 325.
- Fink, G. A. See Dunning, J. R.
- Fink, G. J. See Evans, W.
- Fink, H., judging degree of modification of malt, B., 40. Modern chemistry applied to the fermentation industry, B., 603. Brewing-water problems, B., 656. Degree of solubility of malt, B., 970.
and Hartmann, J., detection of pectin in hops, B., 779.
and Hoerburger, W., fluorescence of the porphyrins. IV., A., 633. Ochronosis of cattle. III., A., 650.
- Lechner, R., and Heinisch, E., preparation of fodder yeast from wood-sugar solutions. I., B., 747.
See also Hoerburger, W., and Waldenström, J.
- Fink, L. M., Barnes, J. T., and Upton, R. W., manufacture of and composition for forming stencil papers, (P.), B., 944.
- Fink, W. L., and Freche, H. R., correlation of equilibrium relations in binary aluminium alloys of high purity, A., 439.
and Willey, L. A., equilibrium relations in aluminium-nickel alloys of high purity, A., 158.
See also Aluminum Co. of America.
- Finkel, J., flour, (P.), B., 252. Prepared cake flour, (P.), B., 252.
- Finkelnburg, W., continuous spectra of flames and arcs, A., 272. Spectra of van der Waals molecules, A., 1292. Interpretation of the spectrum of the cadmium van der Waals molecule, Cd₂, A., 1292. Dissociation, excitation, and emission in condensed sparks at high pressure, A., 1292.
- Finkelstein, B. N., virial theorem and theory of strong electrolytes, A., 823.
- Finkelstein, L. O., and Merson, F. S., chlorides in meningitis, A., 516.
- Finkelstein, N. E. See Abelin, J.
- Finkelstein, V. S. [with Rubanik, M., Avaljani, K., and Chrisman, I.], catalysts for ammonia synthesis, B., 801.
- Chrisman, I., and Rubanik, M., kinetics of carbon monoxide combustion. II. Heat of activation with respect to different catalysts, A., 1080.
and Kudin, I. F., preparation of sulphur from carboniferous pyrites, B., 724.
- Scheludko, M., and Tereschtschenko, A., ammonia gas electrode, A., 1079.
and Zabolotzki, T. V., catalytic pyrolysis of methane and coal gas, B., 258.
See also Danilov, V. I.
- Finlay, C. L., multicolour screens for use in colour photography, (P.), B., 206.
- Finlayson, A., Andrews, P. R., and Sealth Corp., retarding decay of fishing twine, nets, and allied equipment, (P.), B., 304.
- Finlayson, D. See Brit. Celanese.
- Finley, J. A., and California Fruit Growers Exchange, [stable] suspensions, (P.), B., 5.
- Finn, A. N. See Faick, C. A.
- Finn, G. E., determination of accurate formula yields for paste, liquid paints, and liquid enamels, other than lacquers and synthetics, B., 814.
- Finn, J., jun., and Meyer, F. H., coloured cement, (P.), B., 102.
- Finnegan, T. J., Corey, R. C., and Jacobus, D. D., corrosion of steel; quantitative effect of dissolved oxygen and carbon dioxide, B., 807.
- Finnemore, H., and Jaffray, A. B., amount of hydrocyanic acid in blue couch grass (*Cynodon incompletus*, Nees), A., 1042.
- Finney, (*Miss*) G. D., and Evans, R. D., radioactivity of solids determined by α -ray counting, A., 1295.
- Finsterbush, K. R., conversion of hydrocarbons, (P.), B., 759.
- Finzel, T. G. See Charch, W. H.
- Finzenhagen, H. See Miethke, M.
- Fioletova, A. F. See Tschetverikov, S. D.
- Fireman, M. See Anderson, Ernest.
- Fireproof Wall Co. See Thurman, G. S.
- Firestone Tire & Rubber Co. See Dunbrook, R. F., Greenup, H. W., and Zimmermann, M. H.
- Firot, W. M., and Grollman, A., relation of adrenal cortical hormone to vitamin-B₁, -C, and -B₂, A., 539.
See also Grollman, A., and Shumacker, H. B., jun.
- Firschtenberg, N. K. See Lopatto, E. K.
- Firth-Sterling Steel Co., and Comstock, G. J., high-speed steel, (P.), B., 679.
See also Comstock, G. J.
- Fisch, E., production and application of ozone, (P.), B., 452.
- Fischbeck, K., reactivity of solids. III. Combustion of carbon, A., 180.
Maas, H., and Meisenheimer, H., adsorption isotherm, A., 441.
and Salzer, F., alteration of catalytic activity of metals at transformation points, A., 589.
- Fischelis, R. P., and Maltbie Chem. Co., medicinal phenol compounds, (P.), B., 124.
- Fischer, A. See Biglieri, R.
- Fischer, Albert, [relation between] time of coagulation and concentration of coagulant, A., 1002. Coagulating action of homologous organ-extracts, A., 1002. Blood-coagulation as a chain reaction, A., 1002, 1143. Combination of heparin with protein, A., 1002.
and Astrup, T., stoichiometric combination of heparin and coagulant, A., 1002.
- Fischer, August. See Savelsberg, W.
- Fischer, A. C., rubber-bituminous composition, (P.), B., 111.
- Fischer, A. J., [sewage-sludge] digester overflow liquor—its character and effect on plant operation, B., 80.
and Dorr Co., Inc., filter-cake thickness control, (P.), B., 387. Digestion of sewage sludge, (P.), B., 928. Sewage treatment, (P.), B., 1072.
- Lund, N. B., and Dorr Co., Inc., sewage-[sludge] digestion, (P.), B., 1168.
- Fischer, E., determination of dielectric constants of aqueous solutions of strong electrolytes by means of a high-frequency bridge, A., 1318.
- Fischer, E. J., triethanolamino in production of resins, lacquers, paints, and insulating media, B., 1151.
- Fischer, F., synthesis of liquid fuels (kogasins) and lubricating oils from carbon monoxide and hydrogen at atmospheric pressure, B., 179.

- Fischer, F., and Meyer, Karl, use of coke-oven gas in benzene synthesis, B., 390.
- and Pichler, H., transformation of carbon monoxide and carbon dioxide into methane at high pressure, B., 390.
- Pichler, H., and Köbel, H., semi-scale production of "synthesis gas" by simultaneous decomposition of coke-oven gas and steam over coke in a generator, B., 1079.
- Fischer, F. G., and Hultsch, K., aldol condensations. III. Formation of the chain of carotenoids by condensation of β -methyl- Δ^4 -butenal, A., 1353.
- Wehmeier, E., Lehmann, H., Jühling, L., and Hultsch, K., inducing agent in embryonic development, A., 1012.
- and Wiedemann, O., biochemical hydrogenations. I. Hydrogenation of unsaturated α -keto-acids, aldehydes, and alcohols by fermenting yeast. II. Hydrogenation of unsaturated ketones by fermenting yeast, A., 123, 1367.
- Fischer, G. (Stuttgart). See Feitknecht, W.
- Fischer, Gerhard, changes in content and proportions of mineral substances in vegetables, with special reference to iodine, B., 166.
- Fischer, G. B., purification of extracts in the iodine industry, B., 724.
- Fischer, H. See Büsser, W.
- Fischer, H. (Clausthal). See Hock, H.
- Fischer, Hans, adsorption by wood charcoal in solutions and gases, A., 1068.
- and Aschenbrenner, J., bile pigments. XIV. Synthesis of methoxypyromethenes and bilirubinoid pigments, A., 363.
- and Bertl, M., porphyrins. XXXI. Synthesis of tetramethyltetrapropyl-bilirubinoids, tetramethyltetraethylporphyrin I, II, and IV, tetramethyl-tetraisobutylporphyrin I and di-(β -carboxyethyl)tetramethyldipropylporphyrin. XIII, A., 362.
- and Böckh, S., synthesis of chlorophyll porphyrins, A., 633.
- and Breitner, S., chlorophyll. LIII. Chlorophyll-*b*. VI. Identification of the 3-position of the formyl group, A., 503.
- and Fries, G., bile pigments. XII. Synthesis of acetylpyromethenes and bilirubinoids, A., 632.
- and Grassl, J., chlorophyll. LIV. Chlorophyll-*b*. VII. Fine structure of chlorophyll-*b*, A., 763.
- and Haarer, E., porphyrins. XXXII. Amino- and vinyl-porphyrin and derivatives, A., 362.
- and Haberland, H. W., bile pigments. XIII. Constitution of bilirubin and its azo-dyes and the Gmelin reaction, A., 994.
- Halbach, H., and Stern, A., stereobilin and its optical activity, A., 1384.
- and Hasenkamp, J., chlorophyll. LII. Constitution of colouring matter of purple bacteria; 9-hydroxydeoxyphæoporphyrin-*a*. LIN. Conversion of the vinyl group of chlorophyll and its derivatives into a hydroxyethyl group; oxopyrroporphyrin, A., 362, 1134.
- and Hofman, J. [with Strobel, E.], chlorophyll. LVII. Synthesis of deoxyphyllerythroætioporphyrin, A., 871.
- and Holt, E. von, porphyrins. XXXIII. Synthesis of 2:3:6:7-tetra-($\alpha\beta$ -dicarboxyethyl)-1:4:5:8-tetramethylporphyrin; isouroporphyrin I, A., 362.
- Fischer, Hans, and Kellermann, H., chlorophyll. LXI. isoChlorin-*c*, and phyllochlorin, A., 1382.
- and Medick, H., chlorophyll. LVI. Action of diazoacetic esters on chlorophyll derivatives, A., 871.
- and Rose, W., chlorophyll. LVIII. Synthesis of β -unsubstituted deoxyphyllerythrins and an isomeric deoxyphyllerythrin, A., 1134.
- and Scherer, T., chlorophyll. LXII. Derivatives of hydroxyphæoporphyrin-*a*, A., 1382.
- and Schmidt, Walter, chlorophyll. LXIII. Partial synthesis of phycophytin and of some other phæophorbide esters, A., 1382.
- and Spielberger, G., chlorophyll. LI. Partial synthesis of ethylchlorophyllide-*b*; 10-ethoxymethylphæophorbide-*b*, A., 362.
- and Staff, C. E., porphyrins. XXXIV. Porphyrins with unsaturated side-chains; interaction of diazomethane and ethyl diazoacetate and vinylpyrroles, A., 993.
- and Stern, A., chlorophyll. LX. Fine structure of chlorophyll-*a* and -*b*; detection of two asymmetric carbon atoms. LXIV. Fine structure of chlorophyll, A., 1134, 1383.
- Fischer, Hellmut, electrolytic surface treatment of light metals for constructional use, B., 502.
- Leopoldi, G., and Uslar, H. von, determination of small amounts of silver with dithizone, A., 719.
- and Schwan, W., electrolytic fluoride coatings on magnesium and its alloys, B., 730.
- and Weyl, W., absorption spectra of metal complexes of dithizone and their analytical significance, A., 1052.
- Fischer, Hellmuth. See under Glaswerk G. Fischer.
- Fischer, H. G. M. See Standard Oil Development Co.
- Fischer, H. O. L., and Appel, H., *d*-isopropylidenedioxy succinaldehyde (*l*-isopropylidene tartardialdehyde), A., 67.
- and Baer, Erich, glyoxal. II. Glyoxal semiacetal, A., 733.
- Baer, Erich, and Nidecker, H., glyoxal. III. Synthesis with glyoxal semiacetal; nitrolactaldehyde, A., 1353.
- and Dangschat, G., quinic acid and its derivatives. VI. Degradation of shikimic acid to aconitic acid. VII. Configuration of shikimic acid, A., 1365.
- Fischer, Joachim, and Tafel, V., influence of conditions of roasting on the gold yield from Reichenstein arsenic ores, B., 636.
- Fischer, Joseph, Baur and Brunner's measurements of vapour pressure of high-boiling metals, A., 1464.
- Fischer, K. (Darmstadt). See Kunz, K.
- Fischer, Karl, gas drying [with glycerin], B., 708. Volumetric determination of water in liquids and solids, B., 785.
- Fischer, L. See Lynn, E. V.
- Fischer, L. J. See Pollak, Leopold.
- Fischer, Martha. See under Glaswerk G. Fischer.
- Fischer, Martin. See under Glaswerk G. Fischer.
- Fischer, M. H., and Hooker, M. O., lyophilic colloids, their theory and application. I.—III, A., 163, 445.
- Fischer, M. J. See Kruse, W.
- Fischer, P. H. See Raffy, A.
- Fischer, P. Z., physico-chemical characteristics of the eutectic point, A., 1325.
- Fischer, R., identification reactions for *l*-ascorbic acid (vitamin-C), A., 130. Identification of benzoic and cinnamic acids in microsublimates from balsams and resins, B., 684.
- and Hauschild, A., detection and distribution of narcotics in the brain, A., 394.
- and Paulus, W., microchemical identification of coniine and nicotine, A., 1141.
- and Salzer, H., pharmacological differentiation of voramon and a mixture of its components, A., 1532.
- See also Salzer, H.
- Fischer, V., diagram of state for mixtures of any number of constituents, A., 167. Equilibrium diagram for quaternary alloys, A., 927.
- Fischer, W., and Brünner, K., action of carbonic acid on calcium phosphates, A., 1213.
- and Gewehr, R., thermal properties of halides. IX. M.p. and b.p. and polarisation effects of manganide halides, A., 574.
- Fischer, W. von. See Sarver, L. A.
- Fischer, W. M., and Cirulis, A., condensation of isatin and 1:3-indandione, A., 222.
- Fischgold, H., and Chain, E., spontaneous decomposition of lecithin and its bearing on determination of isoelectric point, A., 194. Ampholytic nature of phospholipins, A., 703.
- Fischl, S. See Schering-Kahlbaum A.-G.
- Fischl, V., chemotherapeutic testing of nitro-derivatives, A., 246.
- Kotrba, J., and Singer, E., detection of gold in spirochaetes and trypanosomes, A., 257.
- and Singer, E., chemotherapy of rat trypanosomiasis, A., 1030. Mode of action of chemotherapeutically-used dyes, A., 1539.
- See also Singer, E.
- Fischler, J., calculation of efficiency of contact apparatus for sulphuric acid manufacture, B., 670.
- Fischnich, O. See Laibach, F.
- Fish, J. W. See Jones, C. M.
- Fisher, A., apparent [absorption] of oxygen from permanganate by distilled water, B., 47.
- Fisher, A. (Corby), the Knowles oven process, B., 534. Processing of solid and liquid hydrocarbons in the coal, oil, and gas industries, with references to developments at Corby, B., 789.
- Fisher, Alfred. See Universal Oil Products Co.
- Fisher, A. M., and Scott, D. A., purification of insulin, A., 666. Zinc content of bovine pancreas, A., 788.
- See also Charles, A. F., and Scott, D. A.
- Fisher, C. H., reactive methyl group in toluene derivatives. II. *p*-Nitrobenzotribromide, A., 74. Reaction of magnesium with α -halogeno-ketones, A., 492.
- and Grant, M., 5-bromo-2:4-dimethylbenzoic acid; nuclear halogenation with alkaline hypophalite solution, A., 746.
- and Walling, C. T., xylic acids obtained in the oxidation of 5-bromo- and 5-nitro-*p*-cumene, A., 1363. Reaction of ω -dihalogenoacetophenones with alkali, A., 1367.

- Fisher, D. F., [spray] residue removal, 1933, B., 74.
- Fisher, D. J., crystal classification and symbolism, A., 811.
- Fisher, Eileen, *Fomes pomaceus* (Pers.), Big and Guill, infecting plum trees, A., 1432.
- Fisher, Emory, and Sorum, C. H., chromium hydroxide hydrosols and the Burton-Bishop rule, A., 700.
- Fisher, E. A., and Carter, Richard H., fibre content of British-milled wheatfeed: determination of fibre, B., 77.
- Fisher, E. E., Baernstein, M. A., and Nat. Pigments & Chem. Co., treatment of alloys [brass], (P.), B., 66.
- and Nat. Pigments & Chem. Co., glass, (P.), B., 902. Glass composition, (P.), B., 902.
- Fisher, G. M., foamite corrosion inhibitor, (P.), B., 315. Froth for sealing volatile liquids, (P.), B., 1027.
- Fisher, H. C., and Richardson Co., fibrous composition [pulp], (P.), B., 18.
- Fisher, H. T., modern methods of boiler-water treatment and control, B., 209.
- Fisher, J. K. See Danforth, C. H.
- Fisher, M. S., origin and composition of alluvial gold, with special reference to the Morobe Goldfield, New Guinea, B., 459.
- Fisher, (Miss) N. I., and Hamer, (Miss) F. M., cyanine dyes containing an isoquinoline nucleus, A., 223.
- Fisher, R., and Paulus, W., micro-chemical analysis of monosaccharides, A., 477.
- Fisher, R. B., uric acid synthesis in pigeons. I. and II., A., 1407.
- Fisher, W. E. See Eastman Kodak Co.
- Fiske, A. H., and Rumford Chem. Works, leavening ingredients [baking powder], (P.), B., 429. Canning of vegetables, (P.), B., 429.
- Fizel, H. See Wierzechowski, M.
- Fitch, F. B. See Arpin, J. B.
- Fitterer, R. G., and Freeman, Hyman, use of sponge iron in producing high-quality steels in the electric arc furnace, B., 103.
- Fitz, F., application to the colorimeter of the Schoenheimer and Sperry method for determination of total and free cholesterol, A., 1044.
- Fitz, R. See Blotner, H.
- Fitz, W., Carbolux process for low-temperature carbonisation of bituminous coals, B., 1123. Recovery of block sulphur from the products containing sulphur obtained from the wet purification of gas, especially coal-distillation gases, (P.), B., 260.
- See also Koppers Ges.m.b.H., H.
- Fitzgerald, J. S. See Bull, (Miss) J. E.
- Fitzgerald, O. See O'Connor, J. M.
- Fitzgerald, T. B. See Hill, A. E.
- Fitzgibbon, M. See Leech, H. L.
- Fitzsimmons, (Miss) M. M., measurement of degree of fading [of vat dyes on cotton], B., 302.
- Fitzsimons, O., precision viscosimeter, A., 1342.
- and Thiele, E. W., mol. wt. of cracked distillates, B., 259.
- Fixsen, M. A. B. See Chick, H.
- Flanigan, G. E. See Ansbacher, S., and Supplee, G. C.
- Flanzky, M., detection and determination of methyl alcohol in liquids and in natural substances, B., 539.
- Flaschenträger, B., and Bernhard, K., fat metabolism. XV. Biological degradation of fatty acids, esters, and fats to dicarboxylic acids, A., 1015, 1151.
- and Falkenhausen, F. von, toxic principle of croton oil. II. Constitution of crotophobolone, A., 219.
- and Wolfersdorff, R. von, toxic principle of croton oil. I. Acids of croton oil, A., 64.
- See also Böhm, R.
- Flatt, R., potentiometric determination of minimal quantities of iodine, A., 183. Simple micro-burette, A., 189.
- Flatter. See Lobstein.
- Flaum, G. See Ralli, E. P.
- Flaxman, M. T., and Union Oil Co. of California, preparation [regeneration] of rubber, (P.), B., 738.
- Fleck, H. R., detection and determination of triethanolamine, B., 347.
- Holness, R. F. G., and Ward, A. M., fluorescence acidimetric and adsorption indicators, A., 315.
- Fleck, L. C., and Paper Patents Co., washable wallpaper, (P.), B., 144.
- Fleckel, I. M., Tschernov, I. G., and Turgel, K. I., significance of changes in red corpuscles in early diagnosis of lead poisoning, A., 399.
- Fleetwood, C. W., and Yntema, L. F., electrodeposition of silver from iodide solutions, B., 555.
- Flegler, E., and Raether, H., discharge processes in gases before breakdown, A., 1184.
- Fleischer, A., and Kalunite Co., counter-flow leaching system, (P.), B., 387. Aluminium hydroxide, (P.), B., 673. Alumina, (P.), B., 673, 849.
- Fleischer, R., and Görlich, P., photoelectric effect of caesium oxide cathodes under external fields, A., 808.
- Fleischer, W. E., relation between chlorophyll content and rate of photosynthesis, A., 794.
- Fleischacker, H., and Scheiderer, G., bromine level of the blood and maniacal-depressive insanity, A., 1149.
- Fleischmann, F. See Reiss, M.
- Fleischmann, R., γ -radiation from slow neutrons, A., 141.
- Flemberg, H. K. son, K spectrum of silicon and some of its compounds. I., A., 1293.
- Fleming, J. S. B. See Imperial Chem. Industries.
- Fleming, R., and Reynolds, D., alcoholism. IV. Modification of blood-alcohol after intravenous administration of alcohol, A., 1154.
- Fleming, W. O. See Corning Glass Works.
- Fleming, W. R., rimming steel, B., 190.
- Flesch, C. See Flesch, H., and under Farb- & Gerbstoffwerke C. Flesch, jun.
- Flesch, H., Flesch, C., and Abelman, L. E., wetting and washing agent, (P.), B., 940.
- Flesch, W. See Kautsky, H.
- Fleshman, W. S., clarification [of sugarcane juices], B., 473.
- Fletcher, C. J. M., thermal decomposition of methyl alcohol, A., 40.
- and Hinshelwood, C. N., kinetics of decomposition of diphenyl-iodonium iodide, A., 829.
- Fletcher, H. H. See Taylor, T. C.
- Fletcher, J. L. See Lush, R. H.
- Fletcher, J. P., Best, C. H., and Solandt, O. M., distribution of choline, A., 1396.
- Fletcher, P., stability of sodium metasilicate solutions, B., 225.
- Fletcher, R. T., and Peden, O. D., blood chemistry in epilepsy, A., 1149.
- Fletcher, W. A., and Lyons, R. E., nitro-compounds as oxidising agents, A., 338.
- See also Daniel, C. M., and Dunn, J. T., jun.
- Flett, (Sir) J., thomsonised inclusion from Blackness sill, A., 1100.
- Flett, L. H. See Nat. Aniline & Chem. Co.
- Fleuret, P. H., effect of some substances on mechanism of formation of β -hydroxybutyric and oxalic acids, A., 780. Physiological ketogenesis, A., 891.
- Fleurman, C. See Fleurman, G.
- Fleurman, G., and Fleurman, C., machines for emulsifying mixtures of liquids, (P.), B., 435.
- Fleury, P., and Campora, C., laccase. VI. Purification by sodium carbonate and ammonium sulphate treatment. VII. By dialysis and adsorption. VIII. By ultrafiltration. IX. By combined methods, A., 400.
- and Fatome, M., determination of glycerol in presence of sugars by periodic acid, A., 605.
- Flexner, J. See Amberson, W. R., and Mulder, A. G.
- Flexner, L. B. See Barcroft, J.
- Flexon, F. See Lufkin, G.
- Flieg, O., influence of humates on mobility of phosphates in soils, B., 566.
- Flight, F. H., finishing of [cotton] textile fabrics, (P.), B., 186.
- Flint, A. See Appleyard, K. C.
- Flint, F. C., and Hazel-Atlas Glass Co., fused preparation for glass batches, (P.), B., 1044.
- See also Bowman, S. B.
- Flint, H. T., relativistic basis of the quantum theory. III., A., 912.
- Flint, L. H., and McAlister, E. D., wavelengths of radiation in the visible spectrum inhibiting the germination of light-sensitive lettuce seed, A., 1436.
- Flint, W. P., controlling codling moth by spraying, B., 919.
- Farrar, M. D., and McCauley, W. E., chinch bug barriers and repellents, B., 1013.
- Flint Eaton & Co. See Taylor, G. C.
- Flintkote Co. See Johnston, D. W.
- Fljate, D. M., and Beluikh, N. P., metal corrosion in sulphite pulping, B., 667.
- Flock, E. See Pollack, H.
- Floderer, I. See Schulek, E.
- Floe, C. F., magnesium metal from Washington magnesite and dolomite deposits, B., 191.
- Flohr, E. See Reihlen, H.
- Flood, A. See Schmidt-Nielsen, S.
- Flood, D. T. See Calingaert, G.
- Flood, E. A., valency defined, A., 685.
- Flood, H., formation of droplets in super-saturated mixtures of ethyl alcohol and water vapour, A., 25. Nucleus formation in metastable phases, A., 560. Reaction between calcium hydride and water, A., 1469.
- See also Tronstad, L., and Volmer, M.
- Flordal, M., and Frivold, O. E., diamagnetic properties of inorganic compounds in aqueous solution and in the solid state, A., 1197.
- Florence, G., and Drilhon, A., physico-chemical study of the blood of fish; isoelectric points, A., 643.

- Florence, G., Enselman, J., and Pozzi, M., variation of the absorption spectrum of tyrosine, tyramine, adrenaline, thyroxine, and di-iodotyrosine with the p_H of the medium, A., 563. Absorption spectra of melanins, A., 896. Spectrographic study of the reaction of tyrosinase on tyrosine and related substances, A., 896. Variation of the absorption spectra of tyrosine, tyramine, adrenaline, thyroxine, and di-iodotyrosine with the p_H of the medium, A., 896.
- See also Chanoz, M., and Drilhon, A.
- Florence, R. T. See Swearingen, L. E.
- Florentin, P., and Ehrenfeld, M., effect of thyroxine on growth of the roots of *Allium cepa*, A., 668.
- Florenzki, K. P. See Silbermintz, V. A.
- Florich, J. F., Florich, V. P., and Auto Comfort Products Co., waterproofing composition [for electrical conductors], (P.), B., 910.
- Florich, V. P. See Florich, J. F.
- Florida Cane Products Corporation. See Gosch, J. B.
- Florkin, M., anhydrase activity of the blood and coelomic liquid of invertebrates, A., 102. Oxygen and carbon dioxide content of blood of insects with the open-trachea system, A., 371. Character of internal medium of *Ascidia*, A., 391. Protein content of the blood-plasma of insects, A., 643. Influence of variations of the cryoscopic depression of the external medium on that of the blood and urine of anodonts, A., 1012.
- and Besson, G., extrapallal liquid of *Anodonta* is not identical with the blood of this animal, A., 648.
- Flous, (Mlle.) E. See Canals, B.
- Flowers, A. E., and De Laval Separator Co., refining of mineral oil, (P.), B., 260.
- Fluch, M., Greiner, H., and Loewi, O., anterior pituitary gland and glycogenolysis, A., 411.
- Fluckiger, R., milk products, (P.), B., 748.
- Flügge, S., neutrons of mass 2? A., 1049. Structure of light atomic nuclei, A., 1298.
- and Krebs, A., nuclear chemistry, A., 910. Nuclear transformations and bi-neutrons, A., 1049.
- See also Madelung, E.
- Fluhmann, C. F., demonstration of œstrin in the blood of women, A., 791.
- Fluke, C. L. See Lilly, J. H.
- Fluor, P. E. See Stillger, A. A.
- Fluor Corporation, Ltd. See Stillger, A. A.
- Flusin, G., and Aall, C., system calcium carbide-lime, A., 1204.
- Flynn, E. J. See Hooley, W. C.
- Flynn, K. See Walsh, J. F.
- Fock, V., hydrogen atom and non-Euclidian geometry, A., 1187.
- Focsaner, O. See Terres, E.
- Fodiman, E. B., and Kargin, V. A., absorption spectra of adsorbed materials. I. Adsorption spectra of dyes adsorbed on colloids, A., 1052.
- See also Kargin, V. A.
- Fodor, A., and Kuk, S., action of pepsin-hydrochloric acid on caseinogen and its degradation products produced by the action of hot anhydrous glycerol, A., 1279.
- and Kunos, S., effect of vitamin-C on growth of experimental mouse cancer, A., 381.
- Fodor, A., and Lichtenstein, N., dehydrogenase system of peas, A., 1277.
- Fodor, M. Elisabeth, absorption of vitamin-D through the skin, A., 129.
- Fodor, N. See Hermann, S.
- Föhr, F. See Grassmann, W.
- Földes, F., apparatus for measuring gaseous metabolism of dogs, A., 238.
- Földes, S., mechanical strain in electrolytic plates as a cause for peeling [of chromium plate], B., 679.
- Förster, F. See Eucken, A.
- Förster, J., and Gruner, E., temperature regulator for high temperatures, A., 319.
- See also Gruner, E.
- Förster, T., equilibrium constant of $\text{HH}^2\text{O} + \text{H}_2 = \text{H}_2\text{O} + \text{HH}^2$, A., 33.
- Foex, E., and Burgevin, H., heart rot of beet, B., 472.
- Foëx, M. A., application of electrical conductivity to the study of separations in molten glasses, B., 629.
- Föyn, E., artificial radioactivity, A., 1050.
- Kara-Michailova, E., and Rona, E., artificial transformation of thorium by neutrons, A., 911.
- See also Gleditsch, E.
- Fogelson, E. I. See Zelikov, I. S.
- Fogler, M. F., and Atmospheric Nitrogen Corp., utilisation of nitrogen oxide gases [for production of nitrates], (P.), B., 306.
- Fokin, A. See Pospechov, D.
- Foley, F. B., hardened steel alloy, (P.), B., 193. [Automatic creep test furnace-guide], B., 411.
- Foley, G. See Rosebury, T.
- Folger, A. H., digestibility of brown lucerne hay, sesame meal, and artichoke silage as determined for ruminants, B., 379.
- Folger, R. C., and Electric Smelting & Aluminium Co., treatment of siliceous material and manufacture of cement therefrom, (P.), B., 408.
- Folin, O., determination of creatinine (and creatine) in blood, A., 103.
- Folkens, K. See Zerbe, C.
- Follensby, E. M. See Hooker, S. B.
- Follett, D. H., microphotometric methods in divided-beam spectrophotometry, A., 320.
- Follett-Smith, R. R., mineral content of fodder crops, B., 867. Salinity of cane soils, B., 868. Changes occurring in cane soils of British Guiana, B., 868. Sugar-cane soils, B., 868. Padi-soil investigations, B., 868. Flooding of sugar-cane soils, B., 868. Soil salinity and magnesium toxicity, B., 868. Composition of local [British Guiana] honey, B., 875. Pineapples, B., 875. Sweet potato soils, B., 918. Salt in [sugar-cane juice], B., 1014.
- See also Burnett, F., and Williams, C. H. B.
- Folley, S. J., and Kay, H. D., alkaline phosphomonoesterase of the mammary gland, A., 1164.
- and Peskett, G. L., effects of salts on cell permeability as shown by studies of milk secretion, A., 106. Variations in blood composition, A., 508.
- and Rowsell, E. A., improved screw plunger for use with mercury piston micro-burettes, A., 1476.
- Folmer Graflex Corporation, photographic films [film strip], (P.), B., 975.
- Fomenko, M. M. See Mischtschenko, I. P.
- Fomičov, A. See Danilov, A.
- Fomin, S. V., lecithin in brain when the diet contains animal and plant lecithin, A., 1520. Influence of functional changes in the auditory centres on proteolysis, A., 1534.
- and Demin, V. I., influence of various diets on the amino-acids in muscle, A., 1521. Proteinases and proteolytic processes in muscle. II. Activity of muscle proteinases of the dog's leg after training, A., 1537.
- and Epelbaum, S., influence of extirpation of the motility region of the brain on chemical changes in the muscles, A., 645. Influence of extirpation of the motor region of the cerebral cortex on chemical changes in muscle, A., 1521.
- and Gerschenovitch, Z. S., physico-chemical constants of muscle-tissue. I. Influence of various foods on the conductivity and p_H of rat muscle, A., 1522.
- Gerschenovitch, Z. S., and Demin, V. I., physico-chemical constants of muscle-tissue. II. Influence of training [by electrical stimulation] on the variation of the physical constants of muscle-tissue, A., 1522.
- Gerschenovitch, Z. S., and Strashenko, D. N., physico-chemical constants of muscle-tissue. IV., A., 1522.
- and Makarova, P. T., vitamin-B and -C in preserved spinach and acid preserved foods, A., 1546.
- and Mischkis, M., proteinases and proteolytic processes of muscle tissues. I. Activity of muscle proteinases on qualitatively different protein diets, A., 1537.
- and Pozner, I. E., influence of thyroidectomy on the amino-acid composition of muscle, A., 1521.
- and Strashenko, D. N., physico-chemical constants of muscle-tissue. III. Electrical conductivity and p_H in the autolysis of muscle-tissue of pigeons with avitaminosis-B, A., 1522.
- Fonrobert, E., synthetic resins used in manufacture of varnishes. II., B., 161.
- Lemmer, F., and Resinous Products & Chem. Co., resin-acid compositions substituted in the carboxylic group, (P.), B., 112.
- and Wachholtz, F., thermochemical measurements on polymerisation process of tung oil, with and without linseed oil admixture, B., 732.
- Fontaine, M., fluorescence of blue pigments of the blood of the wrasse, A., 102. Relation between ossification of skeleton and state of blood-calcium of fish, A., 231.
- Fontana, M. G. See Chipman, J.
- Fontès, G., and Thivolle, L., influence of ingestion of iron caseinogenate on body-weight and carbon and nitrogen content of urine of the non-anæmic adult dog, A., 115.
- Fonteyne, R., measurement of light absorption. II. Photo-electric spectrophotometer; systematic errors of photo-electric spectrophotometry, A., 465.
- See also Jaeger, F. M., and Prins, J. A.
- Food Concentrates, Inc. See Johnston, A. L., jun., and Northcutt, R. T.
- Foohy, W. L. See Du Pont de Nemours & Co., E. I.
- Food, S. G. See Willey, E. J. B.
- Foot, F. S. See Carr, J. L.

- Foot, H. W., and Vance, J. E., modified iodometric method of determining copper, A., 837.
- Forbes, E. B., Kriss, M., and Miller, R. C., energy metabolism of the albino rat in relation to the plane of nutrition, A., 651.
- See also Braman, W. W., Kriss, M., and McClure, F. J.
- Forbes, G. S., and Heidt, L. J., optimum composition of uranyl oxalate solutions for actinometry, A., 47.
- Heidt, L. J., and Sickman, D. V., photolysis of azomethane, A., 1468.
- See also Heidt, L. J.
- Forbes, J. C., and Pitts, F. P., utilisation of different magnesium salts, A., 1154.
- Forbes, W. H. See Dill, D. B.
- Ford, A. S., and Industrial Sugar Products Corp., preparation of resinous [moulding] compositions [from saccharides], (P.), B., 70. Formation of resinous composition, (P.), B., 737.
- Ford, M. A. See Vernon, C. C.
- Ford, O. W. See Horat, L. E.
- Forder, R., acidity in paints and varnishes, B., 860. Paint removers, B., 1102.
- Fordyce, C. R., cellulose acetate lacquers, B., 598.
- See also Carbide & Carbon Chem. Corp., Eastman Kodak Co., and Kodak, Ltd.
- Foreman, M. O. See Du Pont de Nemours & Co., E. I.
- Foresti, B. See Chistoni, A.
- Forestier, H., thermomagnetic behaviour of ferromagnetic powders, A., 1063.
- Forgács, T., determination of *coli* index of pasteurised bottled milk in Budapest, B., 825.
- Forgeng, W. D. See Mason, C. W.
- Forkner, C. E. See Zia, L. S.
- Formánek, J., benzene determination in alcohol-benzene mixtures for automobile motors, B., 536. Solidifying point, beginning of liquefaction, and viscosity of automobile oils at low temperatures, B., 614.
- Formozova, L. N. See Lazarev, P. P.
- Formstecher, F., deformation of [photographic] characteristic curves, B., 526.
- Forrer, R., m.p. law and lattice binding, A., 1305.
- and Marian, V., apparatus for measuring Curie points at low temperatures, A., 321.
- Forrest, H. O. See Ward, J. T.
- Forró, M. See Barnóthy, J.
- Forsans, P. E. H., doors for coke ovens, etc., (P.), B., 760.
- Forsberg, L., effects of the previous crop [on yields] B., 72. Growth of sugar beet in late summer, B., 73.
- Forsdale, O. H., and United Merchants & Manufs. Inc., flocked fabric, (P.), B., 799.
- Forsee, W. T., jun., and Pollard, C. B., piperazine. VI. Alkylation by means of aldehydes, A., 1508.
- Thompson, P. J., and Pollard, C. B., automatic pipette for rapid delivery, A., 839.
- See also Pollard, C. B.
- Forsén, L., chemistry of Portland cement, B., 1095, 1143. Water-resistant cement, (P.), B., 806.
- Forsgren, E., and Schnell, R., metabolic rhythm; daily variations in temperature of the body and excretion of water, nitrogen, urea, and urobilin in urine, A., 113.
- Forster, K. A., converting bee poison into a percutaneously effective form for treatment of rheumatism and similar ailments, (P.), B., 478.
- Forster, R. B., identification of metanilic acid and sulphanilic acid, A., 208. Action of hot concentrated sulphuric acid on dyes, B., 94.
- Forstner, H. M., rustproofing of steelwork by zinc coatings, B., 457.
- Foft, J., colorimetric determination of phosphoric acid in aqueous citric acid soil extracts, B., 198.
- Fort, M., theory of acid dye bath, B., 353.
- Forster, S. A., and Dixon Co., H. L., regenerative furnace, (P.), B., 786.
- Fortinski, B. F., Zilberman, M. S., and Pavlovskaja, K. K., resins obtained during production of nicotine, B., 1117.
- Fortunatov, N. S. See Plotnikov, V. A.
- Foschini, A., determination of sucrose in jams and chocolate, B., 204.
- Fosdick, A. H., and Bethlehem Steel Co., coating mould [for casting pig iron], (P.), B., 679.
- Foshag, W. F., burkeite, a new mineral species from Searles Lake, California, A., 323.
- Foskett, C. R. See Mack, M. J.
- Foss, B. Q. P., apparatus for destructive distillation of hydrocarbons, (P.), B., 1126.
- Fosse, R., De Graeve, P., and Thomas, P. E., identification of small quantities of formaldehyde, A., 877. Action of hydrazine on cyclic ureides (parabanic acid), A., 869. Gravimetric determination and identification, by elementary analysis, of small quantities of formaldehyde at great dilutions, A., 1107.
- Foster, A., sorption of propyl and butyl alcohols by silica gel, A., 930.
- Foster, A. G., sorption of vapours by ferric oxide gel. I. Aliphatic alcohols, A., 28.
- Foster, B. E., ratio of fluorescence yields of the L_{11} and L_{22} sub-series of lead, A., 1439.
- Foster, D. G., organic selenium compounds; chemical properties of some arylselenium compounds; preparation of diaryl-selenium acetates, A., 875.
- Foster, J. E. See McBain, J. W.
- Foster, J. P., purification of sugar juices, (P.), B., 329.
- Foster, L. S., and Hooper, G. S., electrolysis of liquid ammonia solutions of sodium triphenylgermanide, A., 506.
- See also Johnson, W. C.
- Foster Wheeler Corporation. See Dean, D. K., Erter, J. H., Frisch, M., and Wallis, J. S.
- Postropol, C., porous concrete, B., 726.
- Fotiev, S. A., chemistry of [pulp] bleaching, B., 449.
- Fouassier, M., Port-du-Salut cheese, B., 781.
- Fouchet, characterisation of barbituric derivatives in urine, A., 118. Alkaline ceritratates, A., 846.
- Foult, C. W., and Pappenhagen, L. A., metallic silver as an ultimate standard in volumetric analysis, A., 54.
- Foulon, A., problem of lime soap in textile treatment [scouring], B., 1041. Production and use of zinc-white, B., 1151.
- Fourcade, J. See Cristol, P.
- Fourtiet, G., direct measurement of low pressures of saturated vapours, A., 599.
- Fourment, M., roasting and fritting of ores in a turbulent flow furnace, B., 809.
- Fourneau, E., chemotherapy of protozoa, A., 535.
- and Druet, J., 4-iodopyrocatechol, A., 208.
- Fournier, H., variation of mechanical properties of an aluminium-magnesium alloy as a function of refining, B., 729.
- Fournier, R. J. See Chalier, J.
- Fouts, P. J. See Helmer, O. M.
- Fowle, F. E., ozone and the sunspot cycle, A., 59.
- Fowler, C., method for the study of crystals found in amoeba by means of X-rays, A., 1166.
- See also Mast, S. O.
- Fowler, D., and Walton, J. H., effect of salts and gelatin on catalytic decomposition of hydrogen peroxide by activated sugar charcoal, A., 830.
- Fowler, E. D. See Demaree, J. B.
- Fowler, L. J., solid fuel for heating, B., 178.
- Fowler, R. D., and Gibson, G. E., intense beams of positive ions, A., 140.
- Fowler, R. H., heavy isotope of hydrogen, A., 274. Rotations of molecules in solids and of the dielectric constant of solids and liquids, A., 683. Statistical derivation of Langmuir's adsorption isotherm, A., 818. Bakerian lecture; anomalous specific heats of crystals, with special reference to the contribution of molecular rotations, A., 1197.
- See also Hulme, H. R.
- Fowler, S., and Benfield, P. J., preservation of eggs, (P.), B., 78.
- Fowler, W. A. See Crane, H. R.
- Fox, A. L. See Du Pont de Nemours & Co., E. I.
- Fox, A. S., Rape, F., and Burton Explosives, Inc., explosivo, (P.), B., 926.
- Fox, C. A., and Whitehead, R. W., effect of cortico-adrenal extract on leucocytes in blood of normal adult rabbits, A., 1391.
- Fox, C. E., preservation of beer, (P.), B., 696.
- Fox, D. E. See Raiford, L. C.
- Fox, D. L., and Sorkness, L. L., coagulation and inactivation of emulsion by heat; influences of crystalloidal and of colloidal solutes, A., 1024.
- See also Standard Oil Co. of California, and Sumner, F. B.
- Fox, E. L., and Mathers, F. C., degree of hydration of magnesia in dolomitic limes, B., 354.
- See also Benedict, F. G.
- Fox, F. W. See Levy, L. F.
- Fox, G. W., and Bowie, R. M., determination of thermionic work function of metals: application to nickel, A., 1293.
- and Fraser, W. A., X-ray extinction in piezoelectrically oscillating crystals, A., 1059.
- Fox, J. F. See Souder, W.
- Fox, J. J. See Klein, C. A.
- Fox, L. M. See Rubinstein, H. S.
- Fox, R. H. S. See Worssam & Son, Ltd., G. J.
- Fox, S. W. See Bergmann, M.
- Foxwell, G. E., variation in behaviour of carbonising plants, B., 339. Production in the coke oven of oils and tars from coal, B., 979.
- Foy, (Mrs.) M. See Kharasch, M. S.
- Fraas, F., and Partridge, E. P., [gravimetric] determination of water and hydrogen sulphide in gas mixtures, B., 628.

- Fraas, *F.* See also Conley, *J. E.*
 Fractional Retort, Inc. See McKinnon, *J. A.*
 Fränkl, *M.*, production of steel in the blast furnace combined with the smelting of acidic ores, *B.*, 853. Separation by rectification of gaseous mixtures or complex liquids, (*P.*), *B.*, 388.
 and Amer. Oxythermic Corp., concurrent evaporator with countercurrent condensation for fractional liquefaction, (*P.*), *B.*, 387. Separation of gaseous mixtures, (*P.*), *B.*, 611.
 Fränz, *H.*, and Weiss, *C.*, determination of self-absorption for evaluation of weak radium-containing substances by the γ -ray method, *A.*, 1048.
 Frampton, *V. L.* See Fife, *J. M.*
 Francaviglia, *A.*, changes in lipin content of blood passing through the lung, *A.*, 523.
 France, *W. G.* See Cook, *E. W.*, McCloskey, *K. E.*, and Paine, (*Miss*) *P. A.*
 Francesconi, *L.*, and Baldissera, *L.*, irradiated ergosterol. *II.*, *A.*, 857.
 and Bruna, *R.*, chemico-physical analysis of waters of Lurisia and Mondovi; presence of lithium in besimaudito, quartziferous porphyry, of the same locality, *A.*, 1477.
 and Opisso, *F.*, irradiated ergosterol. *I.*, *A.*, 857.
 Franceway, *J. A.* See Standard Oil Development Co.
 Franchetti, *S.*, interatomic forces and oscillation frequencies of atoms in lattices, *A.*, 150.
 Francioli, *M.*, phosphatases in fungi, *A.*, 1280.
 Francis, *E. L.*, studies of the wire-drawing process. *VII.* Application of metal coatings as lubricants, with special reference to the drawing and properties of a lead-coated austenitic chromium-nickel steel, *B.*, 550.
 Francis, *E. M.*, and Simonsen, *J. L.*, derivatives of naphthalomethylimide, *A.*, 758.
 Francis, *M.*, expression for Bragg curves for α -particles from radioactive substances, *A.*, 677. Electrolytic preparation of thin layers of U_3O_8 , *A.*, 1330. Use of the McLeod gauge with non-permanent gases, *A.*, 1343.
 and Cheng Da-Chang, preparation of thin layers of uranium oxide U_3O_8 by electrolysis, *A.*, 589. Branching ratio of the actinium family of radioactive elements, *A.*, 1440.
 Francis, *P. R.*, jaw crusher, (*P.*), *B.*, 3.
 Francis, *T., jun.*, transmission of influenza by a filterable virus, *A.*, 108.
 and Magill, *T. P.*, cultivation of human influenza virus in an artificial medium, *A.*, 1542.
 Franck, *H. H.* [with Bredig, *M. A.*, Földner, *H.*, and Hoffmann, *G. H.*], application of röntgenography to problems in technical chemistry, *B.*, 1001.
 Franck, *J.*, carbon dioxide assimilation [in plants], *A.*, 794. [Chlorophyll fluorescence and assimilation of carbonic acid], *A.*, 1177. Hydrogen in palladium, *A.*, 1315.
 and Levi, *H.*, fluorescence in liquids, *A.*, 429. Mechanism of activation of oxygen by fluorescent dyes, *A.*, 681.
 Franck, *O.* See Sundelin, *G.*
 Francke, *W.*, apparatus for wet purification of gases, (*P.*), *B.*, 788.
 François, *F.*, system antimony iodide-potassium iodide-water, *A.*, 303. System antimony iodide-ammonium iodide-water, *A.*, 1077.
 François, *M. T.*, and Laffitte, *M. N.*, micro-determination of hydrogen cyanide, *A.*, 1472.
 Frangopol, *C.*, characterisation of metallic ions by micro-chemical tests with picric acid, *A.*, 949.
 Franicevic. See Delbet, *P.*
 Frank, *A.* See Lisbonne, *M.*
 Frank, *F.*, history of technological conversion of bituminous shale, *B.*, 1028.
 Frank, *H.* See Hertel, *E.*, and Youmans, *J. B.*
 Frank, *H. F.*, metal-container finishing, *B.*, 561.
 Frank, *H. S.* See Robinson, *A. L.*
 Frank, *I.* See Dobrotin, *N. A.*
 Frank, *L.*, vapour pressures of aqueous solutions, *A.*, 694.
 Frank, *N. H.*, effect of pressure on the electrical conductivities of the alkalis, *A.*, 566.
 Frank, *R.*, Zimmerman, *L.*, and Necheles, *H.*, effect of eserine and acetylcholine on gastro-intestinal motility in normal dogs, *A.*, 1421.
 Frank, *R. H.* See Gregg, *A. W.*
 Frank, *W.* See Wegler, *R.*
 Franke, *E.*, and Chem. Fabr. Grunau, Landshoff & Meyer A.-G., boric acid [from kernite], (*P.*), *B.*, 186. Boric acid from sodium tetraborate, (*P.*), *B.*, 305.
 Franke, *K.* See Fikentscher, *R.*
 Franke, *K. W.*, toxic substance occurring in samples of plant foodstuffs. *I.* Feeding trials. *II.* Occurrence in the protein fraction, *A.*, 657.
 and Moxon, *A. L.*, toxic substance occurring in samples of plant foodstuffs. *IV.* Effect of proteins on yeast fermentation, *A.*, 396.
 and Potter, *V. R.*, toxic substance occurring in samples of plant foodstuffs. *III.* Haemoglobin levels in white rats fed with toxic wheat, *A.*, 396.
 See also Moxon, *A. L.*, and Potter, *V. R.*
 Franke, *M.*, and Malczynski, *S.*, lactacidæmia after extirpation of the liver, *A.*, 776. Ketonic substances and hepatectomy in the dog, *A.*, 776. Total cholesterol and its fractions in the blood after hepatectomy, *A.*, 1149.
 Toczyski, *T.*, and Lankosz, *J.*, hepatectomy and nitrogenous substances in the blood, *A.*, 1149.
 See also Slatineanu, *A.*
 Franke, *O.*, variation of dietary protein without simultaneous variation of the urinary quotient, *A.*, 1272.
 Franke, *W.* See Gassner, *G.*
 Franke, *Walter.* See Kuhn, *R.*
 Frankel, *O. H.*, differentiation of grain samples of closely related varieties of wheat by means of a simple mechanical test for grain quality, *B.*, 1160.
 Frankenburger, *W.*, enzyme reactions from viewpoint of heterogeneous catalysis, *A.*, 248.
 and Hodler, *R.*, sorption of hydrogen in tungsten, *A.*, 1315.
 Frankfort Distillery. See Miller, *S. C.*
 Frankforter Oil Processes, Inc. See Mapes, *D. B.*
 Franklin, *G. K.* See Underwood, *H. B.*
 Franklin, *R.*, Allen, *A. J.*, and McDonald, *E.*, micro-moving pictures showing lethal effects of ultra-violet radiation on certain living protozoa, *A.*, 124.
 See also Allen, *A. J.*
 Franks, *R.* See Electro Metallurg. Co.
 Franks, *W. R.*, Shaw, *M. M.*, and Dickson, *W. H.*, effect of radiation, lactate, and iodoacetic acid on tumours, *A.*, 1008.
 and Watt, *A. J.*, phagocytosis of silica by surviving leucocytes, *A.*, 640.
 Franquet, *R.* See Eichhorn, *A.*
 Franz, *E.*, washing process for textile materials, (*P.*), *B.*, 846.
 Franz, *R. A.* See Gilman, *H.*
 Franzini, *T.*, diffusion of gases through metals, *A.*, 439. Diffusibility of deuterium in metals, *A.*, 1315.
 Fraps, *G. S.*, and Fudge, *J. F.*, decomposition of the base-exchange compounds of soil by acids and its relation to the quantity of alumina and silica dissolved, *B.*, 917.
 Fudge, *J. F.*, and Carlyle, *E. C.*, determination of iodine in soils, *B.*, 740.
 and Sterges, *A. J.*, effect of sunlight on nitrification of ammonium salts in soils, *B.*, 740.
 Frary, *F. O.*, aluminium in chemical industry, *B.*, 105. Aluminium as a material for building construction, *B.*, 1098.
 Fraser, *A. H. H.*, and Nichols, *J. E.*, wool growth in sheep as affected by carbohydrate content of the diet. *II.*, *B.*, 827.
 Fraser, *D. M.*, microscopical investigation of Friedensville, Pennsylvania, zinc ore, *A.*, 1101.
 Fraser, *D. T.* See Silverthorne, *N.*
 Fraser, *F. H.*, diversity of toxins produced by hæmolytic streptococci from scarlatinal and non-scarlatinal sources, *A.*, 665.
 Fraser, *F. J.*, kaolin in the Whitemud beds of Saskatchewan, *A.*, 603.
 Fraser, *F. R.* See Barcroft, *J.*
 Fraser, *G. H.*, pulveriser and separator, (*P.*), *B.*, 531. Air separator and driven device, (*P.*), *B.*, 1077.
 Fraser, *G. K.*, Scottish moorlands in relation to tree growth, *B.*, 371.
 Fraser, *K. M.* See Davies, *J. G.*
 Fraser, *R. P.* See Bone, *W. A.*
 Fraser, *W. A.* See Fox, *G. W.*
 Fraser, *W. W.* See Linde Air Products Co.
 Frasti, *S.* See Ragno, *M.*
 Fratklin, *R. L.*, Juravleva, *L. P.*, and Blankschtein, *A. G.*, determination of pyridine in presence of nicotine, *A.*, 1516.
 and Neklievich, *B. A.*, dry distillation of *Nicotiana rustica* and of its waste products in a rotating Fischer retort, *B.*, 1164.
 and Roiter, *D. A.*, indirect method for rapid determination of nicotine in fresh maxorochni and cigar-tobacco leaves, *B.*, 1118.
 See also Trefiliev, *I. A.*
 Frattini, *B.*, determination of folliculin; physiological and international units, *A.*, 666.
 and Maino, *M. M.*, [preparation of the male sexual hormone], *A.*, 1174.
 Frauenhof, *H.*, determination of obnoxious gases [carbon disulphide and hydrogen sulphide] in [air of] viscose rayon factories, *B.*, 1087.
 Fray, *W. W.* See Bale, *W. F.*

- Frayser, L. See Lewis, H. B.
 Frazer, G. E. See Poulter, T. O.
 Frazer, J., sulphur content of plants, A., 1551.
 Frazer, J. C. W. See Bennett, O. G.
 Frazier, E. See Swanson, P. P.
 Frazier, R. H., purity of zinc for which thermal diffusivity was recently reported, A., 22.
 Frazier, W. C., Burkey, L. A., Boyer, A. J., Sanders, G. P., and Matheson, K. J., bacteriology of Swiss cheese. II. Bacteriology of the cheese in the press, B., 874.
 Frazier, W. D., and Frieman, H., alterations in liver-glycogen following thyroid, iodine, and glucose feeding, A., 900.
 Frear, D. E. H., and Worthley, H. N., removal of spray residues from apples, B., 1020.
 Frear, G. L. See Herty, C. H., jun.
 Frearson, T. B. See Brit. Celanese, Ltd.
 Freche, H. R. See Fink, W. L.
 Fred, E. B. See Greene, H. C., Mehlich, A., Oroutt, F. S., and Tatum, E. L.
 Fredenhagen, K., physico-chemical connexion between, and the occurrence of, osmotic pressure and vapour pressure lowering, A., 579. Osmotic behaviour of solutes as a function of the specific interaction between solvent and solute, A., 699. [Osmotic theory], A., 1201.
 Frederich, A., and Mandl, F., determination of neutral sulphur in urine, A., 1267.
 Frederick, F. H. See Edmed, F. G.
 Frederick, H. See Morgan, A. F.
 Frederick, R. C., examination of therapeutic oxygen, B., 1117.
 Frederick Iron & Steel Co. See Riddell, W. A.
 Frederickson, W. R., Hogan, M. E., jun., and Watson, W. W., spectra of strontium hydride, A., 1443.
 Fredericks, H. See Bacq, Z. M.
 Frederiks, V., Michailov, G., and Beneschewitsch, D., conductivity of anisotropic liquids, A., 916. Dielectric loss in anisotropic liquids, A., 1191.
 and Tzvetkov, V., molecular orientation in thin layers of anisotropic liquids and measurement of constants characterising their elastic properties, A., 1062. Orienting action of an electric field on the molecules of anisotropic fluids, A., 1305.
 Frederikse, A. M., viscosity of protoplasm, A., 109.
 Fredga, A., disproportionation reaction of diselenides, A., 962. Configurative relationship between optically active selenodipropionic acid and α -thiodipropionic acid, A., 962. Interaction of diselenodicarboxylic acids with mercury, A., 962.
 Free, G. See Winter, H.
 Freed, C. J., Baum, G. M., Patterson, F. S., and Youngstown Res. Assoc. Inc., filter device, (P.), B., 1075.
 Freed, M. L. See Heineken, W. R.
 Freed, S., and Thode, H. G., magnetic study of metallic state and Fermi-Dirac statistics, A., 18. Magnetic susceptibility of lithium hydride; diamagnetism of ionic crystals, A., 689.
 See also Ahlberg, J. E.
 Freeland, E. M., silicon steels, (P.), B., 957*.
 Freeman, Harry, and Carmichael, H. T., pharmacodynamics of the autonomic nervous system in schizophrenia. I. Effect of intravenous injections of adrenaline on blood pressure and pulse rate, A., 1422.
 and Hoskins, R. G., comparative sensitivity of schizophrenic and normal subjects to glycerol extract of adrenal cortex, A., 518.
 Freeman, Horace, Hunter, J. W., and Consolidated Paper Corp., Ltd., purification of [wood] pulp, (P.), B., 1089.
 Freeman, Hyman. See Fitterer, R. G.
 Freeman, J. R., jun., Kirby, P. H., and Copper & Brass Research Assoc., colouring of copper and its alloys, (P.), B., 314.
 Freeman, M., mixtures of casein and native ox serum-albumin, A., 101. Specific rotation of crystalline cecidins, A., 369.
 Gulland, J. M., and Randall, S. S., oxytocic hormone of the posterior lobe of the pituitary gland; adsorption and electroanalysis, A., 1424.
 Freeman, M. E., separation of one component of potato rugose mosaic by pH difference, B., 1012.
 Freeman, S., and Friedemann, T. E., micro-determination of fat-soluble ester glycerol contained in lymph, A., 512.
 Freeman, S. E., and Meloche, V. W., micro-gas analysis of gas trapped in vitreous enamels on enamelling iron during firing, B., 544.
 Freer, R. M. See Imperial Chem. Industries.
 Freese, F. B. See Baker, J. C.
 Frehden, O. See Feigl, F.
 Frei, P. See Euler, H. von, and Theorell, H.
 Frei, W., respiratory system of bacteria, A., 1541.
 and Froebel, O., influence of infection on tissue respiration, A., 1009.
 Riedmüller, L., and Almasy, F., cytochrome and respiratory systems of bacteria, A., 125.
 Freiburger, F. See Tomiček, O.
 Freiburger, M., treatment of textile and fibrous materials, (P.), B., 542.
 Freidlina, R. C., Nesmejanov, A. N., and Kozeschkov, K. A., synthesis of asymmetric organo-mercury compounds, A., 768.
 See also Nesmejanov, A. N.
 Freisehner, H. See Behaghel, O.
 Freihage, I. J. See Chen, K. K.
 Freinkman, P. E., rapid determination of ash in coke, B., 1079.
 Freise, F. W., pharmacologically valuable constituents of *Bixa orellana*, L., A., 267. Preparation of simaruba bark as an abortive, A., 396. Brazilian simaruba bark and its constituent drugs, A., 674. Point fern (Engelsüss) and some of its relatives as medicinal plants, A., 1550. Brazilian "Cedro" wood oil, B., 381. Distribution of ipeacuanha alkaloids in *Rubiaceae*, B., 477. Essential oils from mushrooms, B., 573. Brazilian "cascarillas," B., 877. Caffeine in Brazilian medicinal plants, B., 1163.
 Freissler, H. See Müller, W. J.
 Freitag, temperature indicator for controlling ironing of cellulose acetate rayon fabrics, B., 540.
 Freitag, C. See Ipatiev, V. N.
 Freitag, H., and Krüger, F., electron emission of tungsten-molybdenum alloys, A., 273.
 Freitag, R., and Lühl, H. A., chlorinated hydrocarbons as transformer oils; prevention of fire and explosion risks, B., 661.
 Frejka, J., and Vymetal, F., halogen derivatives of novocaine. II. 4-Bromo-2-aminobenzoyldiethylaminoethanol, A., 1493.
 Fremont, (Mlle.) T. See Dopfer, P.
 Frenc, M., fractional distillation and condensation, B., 1025.
 French, A. H., Gill, L. O., and Staley Manufg. Co., A. E., plasticiser [for coating of paper, etc.], (P.), B., 1153.
 French, C. S., temperature characteristics for metabolism of *Chlorella*. III. Catalytic decomposition of hydrogen peroxide by *C. pyrenoidosa*, A., 263.
 Kohn, H. L., and Tang, P. S., temperature characteristics for metabolism of *Chlorella*. II. Rate of respiration of cultures of *C. pyrenoidosa* as function of time and temperature, A., 263.
 French, D. K., organic matter in boiler feed-water treatment, B., 81.
 French, H. E., and Schaefer, A. E., action of inorganic bases on *tert*-amyl halides, A., 1349.
 and Wade, W. H., action of inorganic bases on isobutyl bromide, A., 1349.
 French, H. J., Sands, J. W., and Internat. Nickel Co., Inc., free-sealing and free-machining steel, (P.), B., 106.
 French, R. B., and Matill, H. A., biological value of proteins of white, wheat, and rye breads, A., 1406.
 Olcott, H. S., and Matill, H. A., anti-oxidants and autoxidation of fats. III., B., 731.
 French, R. W., and Superior Zinc Corp., zinc oxide, (P.), B., 187.
 Frenkel, G., films and foils, (P.), B., 668. Recovery of volatile liquids, (P.), B., 883. Carrier supports for making films from cellulose derivatives, gelatin, and other plastic substances, (P.), B., 930.
 Frenkel, H., effect of the circulation hormone padutin on resorption of intracutaneous sodium chloride wheals, A., 1173.
 Frenkel, H. L., treatment of natural resins and gums, (P.), B., 111.
 Frenkel, J., Born's theory of the electron, A., 4. Migration velocity of electron colour centres in crystals, A., 565. Continuity of the solid and the liquid states, A., 1062.
 and Kontorova, T., elementary theory of galvanomagnetic phenomena in crystals, A., 1310.
 Todes, O., and Ismailov, S., theory of the allotropic transition process in dipole compounds, A., 572.
 Frenkel, K. Y. See Rozenberger, N. A.
 Frenzel, C., Burian, R., and Haas, O., heats of dilution and osmotic pressures of non-electrolyte solutions, A., 1071.
 Frenzel, H., and Schultes, H., luminescence in water caused by ultrasonic waves, A., 429.
 Fréon, P., preparation of α -hydroxyaldehydes, A., 608.
 Fréreljacque, M., mechanism of autoxidation of uric acid, A., 360. Polarimetric determination of mannitol, A., 844.
 Frerich, R., and Lütgen, T., relationship between the blowing time and output in Bessemer converters, B., 189.
 Fresenius, L. See Lemmermann, O.

- Freshel, C. P., treatment of yeast, (P.), B., 970.
- Freud, J., action of pituitary extracts in castrates (difference between gonadotropic urine extracts), A., 541. Difference between the effects of gonadotropic (early pregnancy) urine and anterior pituitary extracts, A., 541.
- and Oestreicher, F., adrenal cortex hormone (cortin) and sex apparatus, A., 539.
- See also David, K., and Dingemane, E.
- Freudenberg, E., correlation between the splitting of fats and their oxidation, A., 1163. Protein determination from acid-combining power, A., 1261.
- Freudenberg, K., and Braun, E., 2:3:6-trimethylglucose anhydride, A., 1484.
- and Eichel, H., specific carbohydrates of blood groups. II. A., 1000.
- and Jacobi, R., Schardinger's dextrans from starch, A., 848.
- Karimullah, and Steinbrunn, G., tannins and similar compounds. XXVIII. Transformations of anthocyanidins and catechins, A., 867.
- and Meister, M., steric series. XXII. Configuration of alanine, A., 849.
- Sohns, F., and Janson, A., lignin. XIV., A., 861.
- and Wegmann, T., insulin. XIII. The sulphur of insulin, A., 789.
- Weiss, E., and Biller, H., [chemistry of] oxytocin, A., 790.
- Freudenberger, W. See Felton, G. E., and Hamill, W. H.
- Freudenberger, C. B., and Howard, P. M., absorption of oestrogenic substances of pregnancy urine administered orally to young rats, A., 413.
- Freund, H. See Brandt, O.
- Freund, M., relation between physical properties and chemical composition of mineral lubricating oils, B., 615.
- Freundlich, A., prevention of corrosion in ice-making plant, B., 1.
- Freundlich, H., colloid electrolytes; nature and importance for colloidal science, A., 298. Polymerisation of organic substances and their ability to form colloids, B., 442. Thixotropy and plasticity in the rubber industry, B., 962.
- and Gordon, P. S., isoelectric point of isinglass, A., 933.
- and Juliusburger, F., quicksand as a thixotropic system, A., 701. Thixotropy, influenced by the orientation of anisometric particles in sols and suspensions, A., 933.
- and Krüger, D., anomalous diffusion in true solution, A., 928.
- Frevel, L. K., technique for X-ray studies of substances under high pressures, A., 1217.
- and Ott, E., X-ray study of indium and the indium-silver system, A., 285.
- Frewing, J. J. See Thompson, Harold W.
- Frey, A., treatment of spirits with the "oxyesterator," B., 650.
- and Malenke, E., pitching temperatures of mashers for varying fermenting-room temperatures, B., 519. Composition of the first and last runnings of [fermented] plum water, B., 920.
- See also Reindel, F.
- Frey, A. A. See Westinghouse Electric & Manufg. Co.
- Frey, C. N. See Buhrig, W. H., Gore, H. C., Kirby, G. W., and Landis, Q.
- Frey, E., concentration and dilution of urine, A., 380.
- Frey, E. K. See Kraut, H.
- Frey, F. E., and Phillips Petroleum Co., conversion of hydrocarbons, (P.), B., 892.
- See also Schulze, W. A.
- Frey, G., sources of error in the Hagedorn-Jensen method for blood-sugar, A., 373.
- Frey, K. [with Sutter, T., Widmer, G., and Wieland, W.], condensation reactions of aniline with formaldehyde and their importance for preparation of plastic masses, B., 734.
- Frey, O., detection of scopalamine and atropine in presence of phenol, A., 229.
- Frey, R., waste-gas temperatures of rotary kilns, B., 81.
- See also Grootzinger, G.
- Frey, R. W., and Beebe, C. W., prevention of leather "red rot," B., 564. Tannages and treatments resistant to acid rot, B., 1105.
- See also Stuart, L. S.
- Freyburg, H. von, horsetail (*Equisetum palustre*) and the "Duwock" poison "equisetin," B., 690.
- Freyburg, R. H. See Calvery, H. O.
- Freye, H. A., determination of p_H with indicator papers by Höll's method, A., 594.
- Freyer, E., physical factors involved in Swift stability test for fats, B., 813. Modified procedure for determining amount of lint on cottonseed, B., 1038.
- Freyermuth, G. H. See Standard Oil Development Co.
- Freyman, (Mme.) M., and Rumpf, P., absorption spectra, in the near infrared, of amines and amides; use of the phenomenon of "dissimulation" in studying amphoteric ions; influence of neighbouring groups, A., 1444.
- See also Job, P.
- Freyman, R., and Stieber, A., effect of temperature and of visible and [near] infra-red radiation on electrical resistance of boron, A., 148.
- See also Costeau, G., and Job, P.
- Freyng Engineering Co. See Bleibtreu, H.
- Freyssinet, E., elasticity, plasticity, and shrinkage of concrete, B., 229.
- Freytag, B. See Hahn, A.
- Freytag, H., fission of pyridine, A., 222. [Detection of sulphurous acid and its salts and of tin], A., 718. Textile photochemical investigations. V. Production of half-tones on materials by the Uviol-sample process, B., 830.
- and Preiss, S., textile photochemical investigations. I. Ultra-violet pattern dyeing, B., 669.
- Fricke, H., emission velocity of electrons in the "spray" discharge, A., 274. Decomposition of hydrogen peroxide by the irradiation of its aqueous solution with X-rays, A., 943.
- and Browncombe, E. R., inability of X-rays to decompose water, A., 46.
- and Curtis, H. J., electric impedance of suspensions of leucocytes, A., 640. Electric impedance of hemolysed suspensions of mammalian erythrocytes, A., 1260.
- and Hart, E. J., transformation of formic acid by irradiation of its aqueous solution with X-rays, A., 48. Oxidation of Fe^{++} to Fe^{+++} by irradiation with X-rays of solutions of ferrous sulphate in sulphuric acid, A., 458.
- Fricke, H., and Hart, E. J., oxidation of the nitrite to the nitrate ion by the irradiation of its aqueous solutions with X-rays, A., 943. Decomposition of water by X-rays in presence of the iodide or bromide ion, A., 1468. Oxidation of ferrocyanide, arsenite, and selenite ions by irradiation of their aqueous solutions with X-rays, A., 1469.
- Fricke, R., X-ray and electron analysis of inorganic gels, especially hydroxides and oxides, A., 162. [α - $Fe_2O_3 \cdot H_2O$, goethite or needle ironstone, and the conversion of α - $Fe_2O_3 \cdot H_2O$ into α - Fe_2O_3], A., 946.
- and Brümmer, F., equilibrium $NaCl-HCl-H_2O$ at 18°, A., 1204.
- and Klenk, L., heat content and lattice structure of active ferric oxide. II. Amorphous ferric oxide hydrate as initial material, A., 1204.
- and Lüke, J., heat content and lattice state of active magnesium oxide, A., 574.
- Fricker, J. See Ernst, E.
- Fridman, G. V., composition of zinc cements, B., 726.
- Fridman, I. O. See Pletnik, I. I.
- Fridman, K., optimum working conditions for diffusion of [sugar] beet cossettes, B., 518.
- Fridman, S. G. See Plotnikov, V. A.
- Fried, S. See Briner, E.
- Friedemann, T. E. See Freeman, S.
- Friederich, See Médard, L.
- Friederich, E., and Kussmann, A., ferromagnetism of platinum-chromium alloys, A., 573.
- Friedheim, I. See Rosenthal, F.
- Friedl, W. See Galle, E.
- Friedlander, E., absence of natural β -ray radioactivity from beryllium, A., 1185.
- Friedlander, M., Laskey, N., and Silbert, S., relation of blood volume to certain glands of internal secretion; effect of thyroid and gonad ablation, A., 1423.
- Friedman, H. See Chouke, K. S.
- Friedman, L., and Brown, (Miss) B., contractions accompanying the swelling of gelatin, A., 581.
- Friedman, M. H. F. See Chaisson, A. F.
- Friedman, M. M., and Calderone, F. A., determination of chloral hydrate in blood and urine, A., 394.
- Friedmann, E., chemistry of oestrogenic substances, A., 1033, 1173. 4-Methoxycinnamylidenepyruvic acid, A., 1237.
- Friedrich, A., new absorption apparatus for micro-carbon-hydrogen determination, A., 1515.
- Friedrich, F., and Rapoport, S., electrolytic determination of silver, A., 1473.
- Friedrich, H. See Laquer, F.
- Friedrich, H. (Berlin). See Rimarski, W.
- Friedrich, Hans, treatment of polyhalite, (P.), B., 269.
- Friedrich, M. E. See Du Pont de Nemours & Co., E. I.
- Friedrich, P., [bituminous] coating compositions, (P.), B., 466.
- Friedrich, W., failures in fruit preserving, B., 652. Heat and dryness as sources of danger with tinned conserves, B., 652.
- Friedrichs, F. See Howard, D. H., jun.
- Frieman, H. See Frazier, W. D.
- Friend, J. A. N., viscosity, vapour pressure, and latent heat, A., 575. Nitrates of lanthanum, and their solubilities in water, A., 928. Nitrates of neodymium and praseodymium and their solubilities in water, A., 1457.

- Friend, J. A. N., and Marks, S., oxygen preparation from sodium peroxide: a dangerous experiment, A., 51.
and Wheat, W. N., solubilities of the double magnesium nitrates of the cerium group, A., 577.
- Frierson, W. J., and Browne, A. W., preparation of ammonium azide from dry mixtures of sodium azide and an ammonium salt, A., 50.
- Fries, G. See Fischer, H.
- Fries, H. F. See Stockelbach, F. E.
- Fries, K., Walter, R., and Schilling, K., tricyclic compounds in which naphthalene is allied to a heterocyclic component, A., 761.
- Friesen, G., detection of lignin in cell walls, A., 673.
- Friesen, S. von, surface lattice interference in the passage of cathode rays through galena, A., 434. Electronic charge from de Broglie wave-lengths of electrons, A., 911.
- Friesz, I., and Mohos, E., effect of insulin on blood-lactic acid, A., 538.
- Frisch, A. W. See Levine, P.
- Frisch, C., and Willheim, R., glycolysis in cancer tissue. I., A., 885.
- Frisch, M., and Foster Wheeler Corp., pulverisation, (P.), B., 1074.
- Frisch, O. R., induced radioactivity of fluorine and calcium, A., 1186.
and Sørensen, E. T., velocity of "slow neutrons," A., 1186.
- Fritsch, E. See Wille, K.
- Fritsch, H., optimum temperature for desizing [cotton goods] with Diastafor, B., 945.
- Fritsch, O., electrical and optical properties of semi-conductors. X. Electrical determinations with zinc oxide, A., 566.
- Fritz, F., action of sulphur monochloride on linseed oil, B., 509. Rapid determination of oil content of linseed, B., 911. Grape-seed oil—a neglected domestic oil, B., 1002.
- Fritz, H., indirect microchemical detection of alkaline-earth metals on hot cathodes of oxide [dull emitter] valves, A., 837. Detection of use of azides in preparation of electron tubes, A., 1472. Electrolytic drop analysis. I. Theoretical principles, A., 1473.
- Fritz, J. C., determination of uric acid in the mixed excrement of birds, A., 648.
See also Burrows, W. H.
- Fritz, R., applications of the photo-electric cell in the paint and varnish industries, B., 510.
- Fritz, W. A., equation of state of real gases, A., 691.
See also Jakob, M.
- Fritz, Willi, coalescence of fat particles, A., 1005.
- Fritze, A., colour-binding media [for paints and varnishes], (P.), B., 735.
- Fritzman, E. G., new chemical toxicology, its development and significance, B., 832.
- Fritzsche, H. See Karrer, P.
- Frivold, O. E., and Hassel, O. [with Lohne, J.], refractive index and molecular refractivity of hydrogen selenide for the D_2 line (5875.6 Å.), A., 148.
and Sogn, H., molecular susceptibilities of some diamagnetic compounds in different solvents, A., 1197.
See also Flordal, M.
- Frizzell, L. D. See Baxter, G. P.
- Fröboese, V., adulteration of eggs, B., 427.
- Fröbel, O. See Frei, W.
- Fröhlich, H., number of free electrons in a metal, A., 801. Calculation of the emergence work (Austrittsarbeit) in Sommerfeld's metal model, A., 1298.
See also Seidl, F.
- Fröhlich, K. W., action of sulphuric acid on platinum-gold-silver alloys and its importance in decimacy, A., 721. Sources of errors in assaying of gold and platinum, B., 595. Sensitive test for non-metallic impurities in metals, B., 1051.
- Fröhlich, P., temperature optima of phosphorescent dye solutions, A., 1055.
- Frölich, E., embossable rubber composition particularly suitable for artificial leather, (P.), B., 1006.
- Frölich, W., reworking of scrap copper, B., 104. Nickel plating of aluminium, B., 105. Detection and removal of defective chromium deposits from sheet metal, B., 554. Gilding of aluminium, B., 637.
- Frölicher, E., and Süllmann, H., esterification of cholesterol during absorption from the intestine, A., 113.
- Froentjes, W. See Backer, H. J., and Lifschitz, I.
- Fröschel, E. See Trautz, M.
- Frohring, W. O., synthetic vitamin-A-free milk suitable for vitamin-A studies in very young puppies, A., 1428.
and Wyeno, J., carotene and vitamin-A requirements of white Leghorn chicks, A., 261.
- Frolich, G., and Löwe, H., ensilage trials with sugar-beet leaves treated with hydrochloric acid, B., 699.
- Frolich, P. K., and Wiezevich, P. J., cracking and polymerisation of low-mol. wt. hydrocarbons, B., 930.
See also Standard Oil Development Co.
- Frolov, I. D. See Tananaev, N. A.
- Frolov, M. V. See Vasiliev, S. S.
- Frolova, Z. F. See Korovatzki, E. F.
- Frolov, V., [electrical conductivity of] salts dissolved in waters of the autonomous Sandjak of Alexandretta, A., 1477.
- Fromageot, C., and Desnuelle, P., oxidation-reduction potential of yeast suspensions, A., 1165. Determination of pyruvic acid, A., 1223.
See also Chaise, P.
- Fromer, M. See Mack, J. E.
- Fromherz, H. See Doeblemann, E.
- Fromke, E. See Nolte, E.
- Fromm, E. See Grünsteidl, E.
- Fromm, F., photometric determination of small amounts of pyrrole, A., 998.
- Fron, and Monchot, influence of certain quinoline derivatives on growth [of bacteria], A., 537.
- Frondel, C., selective incrustation of crystal forms, A., 61. Size of crystals, A., 953. Oriented intergrowth and overgrowth in relation to the modification of crystal habit by adsorption, A., 1059.
- Frost, A. A., and Oldenberg, O., absorption spectrum of metastable nitrogen molecules, A., 1045.
- Frost, A. V., Ivannikov, P. I., Shapiro, M. I., and Zolotov, N. N., structure and genesis of methyl alcohol catalysts, B., 795.
See also Altschudshan, A. A., and Dobitschin, D.
- Frost, J. G. G., and Nat. Smelting Co., recovery of aluminium [from foundry dross] as aluminium sulphate, (P.), B., 900.
- Frost, L. J. See Thiessen, G. W.
- Frost, S. W., summer contact sprays for peach, B., 742.
- Frost, T. H., [steel razor-blade strip, (P.), B., 106.
- Früh, M., tubular heat exchangers applicable to evaporators, air coolers, and steam generators, (P.), B., 977.
- Frum, F. S. See Burstein, A. I.
- Frumin, L. M., and Fainstein, S. S., toxicology of petrol, A., 1160.
- Frumkin, A., and Bruns, B., maxima of the polarisation curve of mercury cathodes, A., 1079.
- Gordetzkaja, A., and Tschugunov, P., formation of multimolecular layers at the surface of separation between mercury and solution, A., 697. Formation of multimolecular layers on the partition surface mercury-solution, A., 1070.
See also Proskurnin, M.
- Frumkin, L. S., and Gontscharov, I. D., X-ray analysis of caoutchouc and rubber, B., 418.
- Frush, H. L. See Isbell, H. S.
- Fruth, H. F., and Mallory & Co., Inc., P. R., electrolytic condenser, (P.), B., 910.
See also Western Electric Co.
- Fruton, J. S. See Bergmann, M.
- Fry, A., metals as constructional materials, B., 232.
and Schafmeister, P., intercrystalline corrosion in various metals and alloys, especially rust-free steels, B., 311.
- Fry, A. L. See Le Laurin, H.
- Fry, J. D., hygrometric measurement, B., 433.
- Frye, R. See Fairley, T. J.
- Fuchs, B., and Kopfermann, H., isotopes of platinum, A., 909.
- Fuchs, F., industrial utilisation of sodium carbonate present in certain saline waters on the coast of Peru, B., 704.
- Fuchs, G., influence of hydrophilic colloids on structure formation in ferric hydroxide sols, A., 932.
- Fuchs, H., guanidine nucleus in pseudo-mucin, A., 1266.
- Fuchs, H. J., coagulation of the blood as a chain reaction, A., 1143.
and Buss, W., improvement of apparatus for determination of blood-sugar by the Hagedorn-Jensen method, A., 1262.
- Fuchs, J., spore formation by yeasts, B., 694.
- Fuchs, L., and Niekerk, J. van, change of activity of crystalline vitamin-D and its quantitative spectrographic determination, A., 903.
- Fuchs, N., theory of coagulation, A., 164, 1074. Formation of dew, A., 818.
- Fuchs, P., indirect volumetric analysis in technical organic chemistry, B., 91.
- Fuchs, W., rare elements in German brown-coal [lignite] ashes, B., 978.
and Daur, R., synthesis of higher hydrocarbons from methane and carbon monoxide, B., 390.
and Verbeek, H., alumina as a catalyst of hydrocyanic acid formation [from carbon monoxide and ammonia], B., 589.
- Fuchs, W. H., rôle of sugar in the osmotic value of wheat, A., 904.
- Fuchshuber, H., action of alcoholic ammonium acetate in electroanalytical processes, A., 1210.
- Fucke, H. See Maurer, E.

- Fudge, B. R., p_H in citrus-grove soils of the ridge section of Florida, B., 117.
- Fudge, J. F., mathematical relations between total exchange capacity and absorption of ammonium and potassium by soils, B., 1156.
See also Fraps, G. S.
- Füchtbauer, C. [with Schulz, P., Brandt, A. F., and Gössler, F.], widening and displacement of absorption lines, A., 136.
and Gössler, F., displacement and broadening by mercury and xenon of the higher series terms of caesium, and their broadening by potassium and argon, A., 556.
and Reimers, H. J., broadening and displacement of end lines of caesium series by krypton, A., 908. Perturbations of the higher caesium terms by methane hydrocarbons and measurements for the doublet $1s-3p$ of the potassium principal series, A., 1438.
- Fuel Process Co. See Belknap, J. R.
- Fuldner, H. See Franck, H. H.
- Fünfer, E. See Geiger, H.
- Fuente-Alba, A. See Lipschütz, A.
- Fürst, F. See Weigert, J.
- Fürst, K., development of selective extraction processes in refining [petroleum] in the United States, B., 1081.
- Fürth, O., determination of amino-acids, A., 102.
and Edel, E., elimination of uric acid from rat's liver by action of phenyl-cinchoninic acid (cinchophen) and ethyl p -tolylcinchoninate (tolysin), A., 528.
and Herrmann, H., diffusion of fatty acids in presence of cholate, A., 1202. Colour reactions for tartaric, citric, and aconitic acids, A., 1516.
- Fürth, R., and Zimmermann, O., effect of light on Brownian motion, A., 1459.
- Fuess, J. T. See Eastman Kodak Co.
- Fuge, K., influence of therapeutic radium and X-ray treatment on blood-cholesterol and liver, A., 532.
- Fujii, K., influence of bromobenzene on glutathione content of tissues, A., 1159.
- Fujii, M. See Uno, D.
- Fujimoto, K. See Saiki, T.
- Fujimoto, Y., vasomotor effect of phenoxyethylamine and phenoxyethylpiperidine derivatives from viewpoint of the pharmacological importance of a methoxy-group in the m - or p -position in the side-chain, A., 398. Importance of chemical constitution, especially of a methoxy-group in the m - or p -position in the side-chain, for pharmacological action of phenoxyethylamine and phenoxyethylpiperidine derivatives. III. Action on blood-pressure, A., 398. Pharmacology of camphoric acid derivatives: relationship between chemical constitution and pharmacodynamic action. II. Action on blood-pressure and respiration, A., 895.
- Fujimura, K., and Tsuneoka, S., synthesis of benzene from carbon monoxide and hydrogen under ordinary pressures. XX., B., 132.
See also Tsuneoka, S.
- Fujimura, S., antigenic action of starch, A., 1143.
- Fujioka, Y., and Wada, T., molecular spectrum of heavy hydrogen (HD) in the extreme ultra-violet region, A., 1298.
- Fujise, S., and Kubota, T., components of *Matteucia orientalis*; optically active flavanones, A., 91.
- Takeuchi, O., Kamioka, T., and Tiba, K., action of nitromethane on α -diketones, A., 1126.
- Fujita, A., and Iwatake, D., determination of reduced glutathione in tissues, A., 772. Determination of vitamin-C with 2:6-dichlorophenol-indophenol, A., 793.
- Iwatake, D., and Miyata, T., colorimetric determination of vitamin-C, A., 793.
- and Kodama, T., respiration and fermentation of pathogenic bacteria. IV. Oxygen respiration and hydrogen peroxide production of pneumococcus, A., 899.
- Fujita, S., and Uchida, S., pressure drop through dry packed towers. IV. Broken solid packing, B., 177.
See also Uchida, S.
- Fujiwara, Tadayoshi, segregation of ingots in nickel alloy steel forgings, B., 808.
- Fujiwara, Takeo, and Tanaka, Toramaru, characteristic properties of rubber at low temperatures, B., 162.
- Fukagawa, T., salts of γ -amino- β -hydroxybutyric acid, A., 610. Action of epichlorohydrin and chlorohydroxypropylphthalimide on α -picoline and aniline, A., 1118.
- Fukami, Y. See Nakai, T.
- Fukamizu, T. See Nishida, Kitsuji.
- Fukase, T., bile acids and carbohydrate metabolism. XXXIII. Liver-glycogenesis due to administration of constituents of hens' eggs and and cholic acid, A., 390.
- Fuks, N., velocity of vaporisation of small drops in a gas, A., 699.
- Fukuda, M., intensity distributions of spectral lines and emission of the continuous spectra in luminous mercury vapour, A., 424.
- Fukuda, Y. See Oshima, Y.
- Fukunaga, M., liquefaction of Southern Karafuto coal, B., 1123.
- Fukuroi, T. See Aoyama, S.
- Fukushima, T. See Nakao, M.
- Fulde, A. C. See Thielepape, E.
- Fuller, A. C. See Wiebe, A. H.
- Fuller, E. W., Story, B. W., and Vacuum Oil Co., stabilised petroleum wax, (P.), B., 346.
- Fuller, H. V. See Thrun, W. E.
- Fuller, L., electric storage cells or batteries, (P.), B., 910.
- Fuller, M. L., and Wilcox, R. L., phase changes during ageing of zinc alloy die castings. I. Eutectoidal decomposition of β -aluminium-zinc phase and its relation to dimensional changes in die castings, B., 191.
See also Anderson, E. A.
- Fuller Co., and Brerewood, C. H., cement, (P.), B., 548*.
- Fuller Lehigh Co. See Hardgrove, R. M., and Leach, L. L.
- Fullerton, R. G. See Imperial Chem. Industries.
- Fulmer, E. J., Christensen, L. M., and Schopmeyer, H., effect of ammonium chloride on the growth and production of acid by *Aspergillus niger*, A., 1419.
See also Christensen, L. M.
- Fulton, G. E. See Dunbar, T. L.
- Fulton, K. H., and Combustion Utilities Corp., preparation of an insecticidal composition, (P.), B., 920.
- Fulton, M. N. See Bryan, A. H., and Davenport, L. F.
- Fulton, R. R., and Puritan Soap Co., hydraulic pressure-transmitting fluid, (P.), B., 1027.
- Fulton, S. C., and Stanco, Inc., insecticide, (P.), B., 1062.
See also Standard Oil Development Co.
- Fulweiler, W. H., the gum problem [in the gas industry], B., 341.
and United Gas Improvement Co., prevention of gum formation in gas-distribution systems, (P.), B., 1033.
See also Jordan, C. W., Perry, J. A., and Ward, A. L.
- Funakoshi, O., analysis of bismuth by means of selenious acid, A., 1339.
- Funakoshi, S., and Shimaoka, T., which component of the complement is lacking in the lymph of the peripheral vessels? A., 1003.
- Funk, C., Zeffrow, P., and Funk, I. C., acidosis-producing substance (A.H.) of normal urine, A., 1268.
- Funk, H., action of niobium and tantalum pentachloride on organic compounds. IV., A., 73.
and Römer, F., determination of metals with anthranilic acid. IV. Determination of lead and mercury, A., 720.
and Steps, H., measurement of spectral distribution of intensity of fluorescence of Röntgen screens and intensifiers, A., 839.
- Funk, J. C. See Funk, C.
- Funk, V., determination of naphthalene in gases, B., 580.
- Funke, G. W., N-H bands at λ 3360, A., 1298.
- Funke, J., and Simons, C. F. E., β -bands of boron monoxide, A., 561.
- Fuoss, R. M., two theorems concerning electrolytes, A., 33. Solution of the conductance equation, A., 584.
and Kraus, C. A., electrolytic solutions. XV. Thermodynamic properties of very weak electrolytes, A., 302.
See also Cox, N. L.
- Furia, A., wet metallurgy; chlorination of lead ores, B., 412. Concentration by flotation. IX. Treatment of concentrates, B., 856.
- Furihata, M. See Tanaka, Yoshio.
- Furman, I., compositions for coating and impregnating paper, etc., (P.), B., 18.
- Furman, N. H., and Low, G. W., jun., comparison of several electrometric and nephelometric methods for determination of small amounts of chloride, A., 1336. Use of the concentration cell in quantitative analysis. I. Determination of small amounts of chloride in salts, A., 1336.
- Furmer, J. E. See Litvinov, N. D.
- Furnas, C. C., and Kaye, W. A., heat transfer involving turbulent fluids, B., 881.
See also Brunjes, A. S.
- Furness, W. H., and Furness Corp., rayon, (P.), B., 1138.
- Furness Corporation. See Furness, W. H.
- Furnstal, A. F., rotating ball mill, B., 1025.
- Furry, W. H., and Carlson, J. F., high-energy electron pairs, A., 1294.
- Fursae, A. D., and Nazarova, N. S., oil content of certain wild plants of the Lower Volga district, B., 814.
- Furter, M., microchemical balances, A., 1098.

- Furter, M., and L'Orange, J., determination of components of a mixture of trinitrotoluene and pentaerythritol tetranitrate by micro-hydrocarbon analysis, B., 335.
See also Ruzicka, L.
- Furukawa, S., constituents of *Ginkgo biloba*, L., fruit. IV., A., 615.
See also Kobayashi, Yozo.
- Furukawa Denki Kogyo Kabushiki Kaisha, copper alloy, (P.), B., 155.
- Furuya, H. See Endô, E.
- Fuschi, G., and Korach, M., articles of porcelain and stoneware, (P.), B., 1044.
- Fusco, D., alkaloid salts of camphorsulphonic acid, A., 1375.
- Fusejima, O., glycogen content in the central nervous system of human embryos, A., 1397.
- Fuson, C. G., Weinstock, H. H., jun., and Ulliot, G. E., synthesis of benzoin; 2':4':6'-trimethylbenzoin, A., 1499.
See also Bull, B. A., and Johnson, R.
- Fussgänger, R., action of the male hormone, A., 129.
- Fussler, K. H. See Ruark, A. E.
- Fussteig, R., extraction of paraffin residues, B., 7. Paraffin waxes and dewaxing, B., 259. Paraffin, B., 259. Paraffin [wax], B., 536. Pyrolytic decomposition and hydrogenation of saturated hydrocarbons, B., 836.
- Futagami, T. See Nagaoka, H.
- Fuzikawa, F., quinones from homologues of orcinol and their bromo-substituted products, A., 347.
See also Asahina, Y., and Zahlbruckner, A.
- Fylking, K. E., phosphides and arsenides with modified nickel arsenide structure, A., 920.
- G.**
- Gaade, W., reaction between ethyl oxalate and ethylenediamine, A., 1106.
- Gaarder, T., and Grahl-Nielsen, O., fixation of phosphoric acid in soils. II. Investigations in West Norway, B., 565.
- Gaathaug, J., chloral and bromal derivatives, (P.), B., 782.
- Gabbe, E., determination of vitamin-C in blood-serum, A., 547.
- Gabe, S., and Evans, E. J., Hall effect and other physical constants of alloys. IV. Bismuth-cadmium series, A., 693.
- Gabel, J. O., and Matzkevitch, R. M., interaction of ethylene oxide with *m*-phenylenediamine, A., 969.
- Gabel, L. F., free alkali in glass, B., 227.
- Gabiano, P., natural and magnetic rotatory power of pinene vapour, A., 283.
See also De Malleman, R.
- Gabinski, J. O., and Krim, E. S., laboratory method for determination of yields of volatile products of carbonisation, B., 979.
- Gabriel, preparation of silage, with special reference to the German protein and fat programme, B., 922.
- Gabriel, A., optical properties of salts in the system $(\text{NH}_4)_2\text{SO}_4\text{-CaSO}_4\text{-H}_2\text{O}$, A., 684.
and Partridge, E. P., potassium sulphate from polyhalite and sylvinit, B., 801.
See also Schroeder, W. C.
- Gabriel, P., flame determination of copper by carbon tetrachloride, A., 55.
- Gabrieliantz, S. M., and Artemeva, O. A., composition of sulphur compounds in the distillates of Grozni asphalt-base and Baku crude oils, B., 1029.
and Isaev, S. A., quality and quantity of gas obtained from coking stills, B., 1028.
See also Virobiantz, R. A.
- Gabrielsen, E. K., assimilation of carbon dioxide by leaves in different regions of the spectrum, A., 905.
- Gad-Andersen, K., and Jarlov, E., extraction of folliculin and an associated pharmacological problem, A., 1544.
and Jarlov, E., do sexual hormones influence germination and growth of plants? A., 1548.
- Gadals, J. See Gadais, L.
- Gadals, L., and Gadais, J., determination of potassium bitartrate in calcium tartrate, B., 1129.
- Gadd, M. G. See Borodin, P. R.
- Gaddie, R., and Stewart, C. P., anaerobic breakdown of carbohydrate in the isolated frog ventricle, A., 110. Role of glutathione in muscle glycolysis, A., 1278.
See also Clark, A. J., and Stewart, C. P.
- Gaddum, J. H., and Schild, H., depressor substances in extracts of intestine, A., 780.
See also Feldberg, W.
- Gaddum, L. W., glucosides and minerals in citrus fruits, A., 1435.
- Gaddy, V. L. See Wiebe, R.
- Gaebler, O. H., effects of thyro-parathyroidectomy and carbohydrate intake on action of anterior pituitary extracts, A., 901. Action of anterior pituitary-like substance or urine on metabolism of dogs, A., 1171.
- Gaertner, H., electron diffraction on oxide-coated filaments, A., 287.
See also Erlenmeyer, H., and McDougall, E. J.
- Gaertner, O., new absolute determinations of energy consumption in ionisation of argon by X-rays, A., 273. Relative ionisation of gases measured with the *K α* line of copper, A., 1046.
- Gaetz, H. T., water-white hydrocarbons from asphalt, B., 709.
- Gäumann, E., distribution of constituents of the beech (*Fagus sylvatica*, L.), A., 1039.
- Gaffron, H., metabolism of purple bacteria. II., A., 406. Mechanism of the activation of oxygen by irradiated pigments. II. Photo-oxidation in the near infrared, A., 1087. Carbonic acid assimilation by red sulphur bacteria. II., A., 1167. Non-indispensability of oxygen for carbon dioxide assimilation by green plants, A., 1288. Non-dependence of carbon dioxide assimilation of green plants on presence of small amounts of oxygen; reversible inhibition of assimilation by carbon monoxide, A., 1547.
- Gage, C. E., degumming and mechanical treatment of vegetable fibres in preparation for spinning, (P.), B., 943.
- Gage, J. C., potency of digitoxin, A., 527.
- Gager, C. S., effect of radium rays on living cells, A., 1534.
- Gager, R., and Zechner, L., arbutin content of leaves of *Vaccinium vitis idaea*, A., 421.
- Gagge, A. P., electron scattering in mercury vapour, A., 1439.
- Gagnier Fibre Products Co. See Eimer, E. J.
- Gagnon, P. E. See Vachon, A.
- Gagyi, J. von, disturbance of corpus luteum formation in avitaminosis-C and diphtheric intoxication, A., 1527.
- Gahlen, K., physiology of leaf cells of *Elaeagnus canadensis*, A., 671.
- Gairois, R. See Udaondo, C. B.
- Gaidies, G. See Gen. Electric Co.
- Gaines, A., jun. See Walden, G. H.
- Gainsborough, H. See Gardner, J. A.
- Gaisser, F. See Schneider, Albert.
- Gajendragad, N. G., and Jatkar, S. K. K., equilibrium between *n*-propyl alcohol, propyl ether, and water at 190°, A., 1349.
- Gajewski, Z. See Szper, J.
- Gajowczyk, F., and Suszko, J., optically active naphthalenesulphoxyacetic acids, A., 856.
- Galabutskaia, E., and Govorova, R., bleaching of kaolin, B., 22.
- Galachov, G. See Zdanov, I.
- Galanov, A. S. See Uschakov, M. I.
- Galatis, L., and Megaloikonomos, J., preparation of dibromodiphenylamine by direct bromination, A., 613.
- Galber, H. See Cone, C. N.
- Galberschadt, I. See Kapuchin, P. P.
- Galbraich, E. E. See Kobosev, N. I.
- Galbraith, F., and Smiles, S., rearrangement of *o*-hydroxysulphones. V., A., 1490.
- Galea, I. See Ostrogovich, A.
- Galecki, A. [with Hoja, E., Neterowicz, J., and Modrzejewski, F.], influence of gelatin on processes in systems Zn-ZnSO_4 and Zn-CuSO_4 , A., 306.
- Galet, (Mlle.). See Balasse, G.
- Galion, A. I. See Sokalov, G. A.
- Gall, D. C., improvement in precision potentiometers, A., 1341.
- Gall, H. See Lohaus, H.
- Gallagher, M., and Keyes, D. B., activities of ethylene and ethyl alcohol in sulphuric acid, A., 34.
- Gallagher, T. F., and Koch, F. C., male hormone as obtained from urine, A., 260. Quantitative assay for the testicular hormone by the comb-growth reaction. II., A., 1427.
See also Dorfman, R. I.
- Gallais, F., iodo-mercuric acid, A., 592.
- See also Achard, C.
- Gallay, C. H., and Soc. Usines Chim. Rhône-Poulenc, recovery of resorcinol, (P.), B., 219.
- Galle, E., Klatt, R., and Friedl, W., distinguishing hydrocarbons [in petroleum products], B., 980.
and Michelietsch, W., hydrogenation catalysts, B., 403.
- Galle, K. See Riesser, O.
- Gallego, M. See Montequi, R.
- Galley, R. A. E. See Wool Industries Res. Assoc.
- Gallier, R. See Lecoq, R.
- Gallo, G., volume stability of glycerol-litharge cements, B., 726. Utilisation of leucite, B., 1141.
- Galloway, L. D., moisture requirements of mould fungi, with special reference to mildew in textiles, B., 540.
- Gallsworthy, B. See Texas Co.
- Gallup, J., transformation of aluminium oxide from the β - to the α -form, A., 812.
- Gallup, W. D., specific effect of vitamin-A on growth, A., 415.
and Reder, R., calcium salts in detoxication of gossypol, A., 396. Influence of certain dietary constituents on response of rats to gossypol ingestion, A., 1529.

- Galmes, J. See Prunell, A.
 Galopin, F. See Gutzeit, G.
 Galperin, L. See Ferdmann, D.
 Galpin, S. L., and Nölting, J. P., jun., an undescribed variety of flint clay, B., 149.
 Galson, H. L., and Philadelphia Drying Machinery Co., dryer, etc., (P.), B., 385.
 Galtsoff, P. S., biochemistry of invertebrates of the sea, A., 377.
 Galuschka, A. See Kirpal, A.
 Galusha, A. L., gas producer, (P.), B., 9.
 Galvez, N. L., expressed soil solutions and root-soluble plant nutrients, B., 324.
 Galvialo, M. J., and Sutschkova-Netschaeva, L. P., catalase action of the various component parts of erythrocytes, and artificial catalase systems, A., 658.
 Gambill, E. L. See Poe, C. F.
 Gamble, C. J. See Donal, J. S., jun.
 Gamble, D. J. C., and Kon, G. A. R., syntheses of polycyclic compounds related to sterols. III. 9-Methyl- and 3:9-dimethyl-cyclopentenophenanthrene, A., 741.
 Kon, G. A. R., and Saunders, B., syntheses of polycyclic compounds related to sterols. IV. Identification of 3'-methyl-1:2-cyclopentenophenanthrene and its preparation from cholesterol, A., 968.
 Gamble, J. L., McKhann, C. F., Butler, A. M., and Tuthill, E., economy of water in renal function referable to urea, A., 106.
 Gamble, S. Le B. See Berolzheimer, S. M.
 Gamow, G., negative proton, A., 801.
 Gamperl, G., fat in barley and its malting products, A., 134.
 Gamzulov, J. I., volumetric determination of zinc in magnesium and its alloys of the type of elektron, B., 272.
 Ganapati, K. See Chakravarti, S. N., and Guka, P. C.
 Ganassini, D., presence of acetaldehyde in living creatures, A., 653.
 Gandel, See Lev.
 Gandini, A., and Vignola, T., lavender oil from the province of Savona, B., 45.
 Gandolfo, C. F. See Buzzo, A.
 Gandrud, B. W., and Evans, R. E., southern gold ores, B., 953.
 Gane, R., production of ethylene by ripening fruits, A., 265.
 Ganesan, A. S., Raman effect in selenic acid and selenates, A., 11.
 Gangadharan, A. See Varma, P. S.
 Gangl, J., determination of small amounts of arsenic, A., 718. Chemical deterioration reactions in foods, B., 921.
 and Rumpel, W., "deterioration value," an iodometric determination of oxygen-addition products in fats and oils, B., 364.
 Ganguli, A., statistical theory of regular solutions, A., 823. Adsorption, A., 929.
 and Mitra, P., transport phenomena and quantum mechanics, A., 1187. Surface tension and its variation with temperature, A., 1193.
 Ganguli, N. See Krishnan, K. S.
 Ganguli, S. C. See Ghosh, J. C.
 Ganguly, P. B. See Ray, R. C.
 Ganguly, S. N., and Le Fèvre, R. J. W., volume effect of alkyl groups in aromatic compounds. VI. Constitution of iodo-p-cymene formed by direct iodination, A., 74.
 Gann, J. A. See Dow Chem. Co.
 Gans, D. M., Harkins, W. D., and Newson, H. W., failure to detect radioactivity of beryllium with the Wilson cloud chamber, A., 141.
 See also Harkins, W. D.
 Gans, J., and Columbia Appliance Corp., filter, (P.), B., 1026.
 Gans, R., [what is known of ferromagnetism with small changes of field?], A., 149.
 and Wittke, H., ferromagnetism for small variations of field, A., 1196.
 Ganser, H. See Wilke, E.
 Ganssen, R., and Utescher, K., evaluation of experimental data for slate and greywacke soils, A., 843.
 Gansser, A., supposed tanning in the palæolithic age, B., 916.
 Gantimurov, I. I., characteristics of soils and plant coverings of the steppes, B., 372.
 Gantois, Lejeune, Noël, and Scohy, determination of iron and titanium in window glass, B., 61.
 Gapon, E., and Ivanenko, D., α -particles in light nuclei, A., 278.
 Gaponenkov, T. K., isomerisation of α -pinene, A., 496. Refractive index of hydrosols of pectin substances, A., 933. Effect of varying conditions of hydrolysis of protopectin on yield of pectin hydrate, B., 331.
 Gaposchkin, C. H. P. See Russell, H. N.
 Garavelli, L. A. See Laug, E. P.
 Garbaczówna, I. See Wiertelak, J.
 Garber, K., physiology of action of ammonia gas on plants, B., 1110.
 Garber, R. J., and McIlvaine, T. C., analysis of variance of maize yields obtained in crop-rotation experiments, B., 868.
 Garbinton, Ltd., and Johnson, J. B. E., soap and glycerin, (P.), B., 276.
 Garcia, E. Y., effects of chlorinated lime in lethal concentrations on *Entamoeba histolytica* cysts, B., 976.
 Garcia, G. See Guzman, J.
 Garcia, H., η_H of cocoa, B., 251.
 Garcia, J., spontaneous calcification of bone in experimental rickets in the rat: chemical and radiographic tests, A., 776. Variations of the phosphorus-nitrogen ratio of bone in experimental rickets in the rat, A., 776.
 See also Roche, (Mme.) A.
 Garcia-Lorenzana, J., grain-size measurements in the cement industry; determination of free lime in clinker, B., 24.
 Garcia Marquina, J. M., electrolysis of alkali fluorophosphates, A., 589.
 Gard, C. D. See Union Oil Co. of California.
 Gard, E. W., and Aldridge, B. G., asphaltic products, (P.), B., 214.
 Aldridge, B. G., and Union Oil Co. of California, vapour-phase cracking of oil, (P.), B., 217.
 Subkow, P., and Union Oil Co. of California, apparatus for heating and cracking oils, (P.), B., 662.
 and Union Oil Co. of California, dewaxing of oils, (P.), B., 1035.
 See also Black, J. C.
 Gardiner, R. F. See Walton, G. P.
 Gardner, A. T. See Davis, A. B.
 Gardner, D., and Caselli, M. L., biological properties of carvacrol, A., 900.
 Procofiel, M., Jusov, G., and Caselli, M. L., synthesis of carvacrol, A., 744.
 Gardner, E. D., and Sullivan, J. D., oxidation of copper sulphide minerals in copper ore, B., 551.
 Gardner, F. T. See Higgins, E. C., jun.
 Gardner, H. A., primers for wood, B., 509. Disinfecting, (P.), B., 576. Treated [carbon-black] pigment, (P.), B., 914. Modified drying oil, (P.), B., 1102. Coating and impregnating composition [for paper, etc.], (P.), B., 1153.
 Hart, L. P., and Gardner Laboratory, Inc., H. A., sulphur-terpene compounds [vulcanisation accelerators], (P.), B., 370.
 See also Hunter, R. S.
 Gardner, J. A., Gainsborough, H., and Murray, R. M., distribution of sterols in human faeces; ideal contents, A., 774.
 Gardner, J. H., preparation of chrysophanic acid from chrysarobin, B., 286. Chrysarobin, U.S.P., B., 286.
 and Joseph, L., coloured local anaesthetics, A., 969.
 McDonnell, T. F., and Wiegand, C. J. W., preparation and hydrolysis of α -hydroxyanthraquinone glucosides, A., 983.
 and Semb, J., relation of η_H and surface tension to the activity of local anaesthetics, A., 1155.
 Gardner, R. E. (Baltimore). See Martin, G. J.
 Gardner, R. E. (Geneva). See Stoll, M.
 Gardner, W. H., shellac insulators, B., 562.
 and Gross, B., thermo-plastic properties of shellac, B., 562. Nature and constitution of shellac. X. Compatibility of French varnish with nitrocellulose solutions, B., 599.
 and Harris, H. J., nature and constitution of shellac. IX. Determination of solubility in organic liquids, B., 69.
 Gardner, W. M., Diddle, A. W., Allen, E., and Strong, L. C., effect of oestrin on mammary rudiments of male mice differing in susceptibility to tumour development, A., 413.
 See also Allen, E.
 Gardner Laboratory, Inc., H. A. See Gardner, H. A.
 Gardner-Richardson Co. See Harvey, A. R.
 Swan, J. H., and Thomas, C. Allen.
 Garelli, F., and Racciu, G., condensation of phthalic anhydride with amino-alcohols, A., 619.
 Garforth, B., and Pyman, F. L., 4(5)- β -alkylaminoethylglyoxals, A., 759.
 See also Boots Pure Drug Co.
 Garino, M., "undetermined losses" [in beet-sugar manufacture], B., 201. Corrosion [by sugar juices] in evaporators, B., 518.
 and Catto, R., rapid determination of small quantities of bismuth in copper, B., 678.
 and Parodi, M., corrosion phenomena in [sugar-factory] evaporators, B., 692.
 Parodi, M., and Vignolo, V., action of air on solutions of pure sucrose, A., 735.
 Garino-Canina, E., oxidation-reduction potential and enological technique, B., 824.
 Garlock, N. B. See Felsing, W. A.
 Garlough, F. E. See Ward, J. C.
 Garman, P., lead arsenate [insecticide] substitutes, B., 74.
 Garman, R. L., and Droz, M. E., line-operated vacuum-tube voltmeter, A., 1340.
 and Kinney, G. F., electronic bridge balance indicator for conductance measurements, A., 1341.

- Garner, F. H., Grantham, J., and Sanders, H. G., electric oven for drying [crop] samples from field plots, B., 919.
- Garner, J. B. See Standard Oil Development Co.
- Garner, R. L. See Hellerman, L.
- Garner, T. L. See Blow, C. M.
- Garner, W. E., and Latchem, W. E., detonation of nitrogen iodide, NI_3 , NH_3 , A., 828.
- and Pollard, F. H., catalytic effect of hydrogen on the carbon monoxide flame, A., 454, 588.
- and Veal, F. J., heat of adsorption of gases on zinc oxide and $\text{ZnO}-\text{Cr}_2\text{O}_3$ at low pressures and room temperatures, A., 1457. Thermocouple vacuum calorimeter [for determining heats of adsorption], A., 1474.
- and Willavoy, H. J., lower limit of ignition of hydrogen-oxygen mixtures, A., 708.
- See also Bright, N. F. H., and King, A. M.
- Garnett, H. J. See Telegraph Construction & Maintenance Co.
- Garnier, J. See Cornubert, R.
- Garnier, R., and Palfrey, L., determination of ethyl and methyl alcohols in natural essential oils, B., 828.
- Garno, G. E. See Barrett, L. J.
- Garoni Products Co. See Rolle, J. B.
- Garono, L. E. See Sherwood, T. K.
- Garratt, A. P., and Thompson, Harold W., thermal decomposition and oxidation of nickel carbonyl, A., 40. Spectra and photochemical decomposition of metallic carbonyls. II. Photochemical data, A., 47.
- Garratt, D. C., detection of Japanese mint oil in peppermint oils, B., 749. Application of furfural[dehyde] test for mint oils to other essential oils, B., 1118.
- See also Coste, J. H.
- Garre, G., detection of unsound spots in zinc coatings on steel, B., 1050.
- Garreau, (Mlle.) Y., phenolsulphonates in the urine of dogs, A., 245. [Attempted] synthesis of phenyl sulphates. I. Oxidation of mixtures of phenols with mineral compounds of sulphur in alkaline media, A., 338.
- Garrett, F., high-speed steel with molybdenum and tungsten, B., 905.
- Garrett, J. E., flotation of unclassified ball-mill discharge for recovery of lead and zinc concentrates, B., 104.
- Garrey, W. E., and Boykin, J. T., vaso-inhibitory effects on respiratory metabolism of the heart after treatment with dinitrophenol, A., 1159.
- Garrick, F. J., purification and analysis of purpleo-cobaltic chloride, A., 1335.
- Garrido, A., and Moles, E., structure of the schönites, A., 954.
- Garrido, J., crystal structure of manganite, A., 286, 1060.
- Garrigue, H., radioactivity of mountain air, A., 468.
- Garrigue & Co., W. See Sieck, W., jun.
- Garrigus, W. P., and Mitchell, H. H., effect of grinding on digestibility of maize by pigs and on its content of metabolisable energy, B., 971.
- Garrison, C. W. See Koppers Co. of Delaware.
- Garrison, E. A. See Morgan, A. F.
- Garrison, M. E., Loenen, W. F. van, and Petroleum Rectifying Co. of California, agglomeration of suspended particles [of water in oil], (P.), B., 663.
- Garrod, L. P., Chick-Martin test for disinfectants, B., 480.
- Garthe, F., mixing apparatus, (P.), B., 1075.
- Gartley, W. H., tar wash-box, (P.), B., 10.
- Garton, E. L. See Lane, E. C.
- Gartshore, J. L., properties of paper stock: composition of furnish, freeness, and wetness, B., 399.
- See also Cottrill, L. G.
- Garvin, T. M. See Schuette, H. A.
- Garwood, L. J. See Pearce, J. N.
- Garzuly-Janke, R., organometallic compounds, A., 479.
- Gas Chambers & Coke Ovens, Ltd., Kemp, A. V., and Morris, A. E., retort furnaces, etc., for heat-treatment of solid materials, (P.), B., 582.
- and Ritson, F., construction of carbonising chambers, retorts, and similar apparatus for heat treatment of carbonaceous materials, (P.), B., 661.
- Gas Fuel Corporation. See Ditto, M. W., and Russell, R. H.
- Gas Light & Coke Co., Griffith, R. H., and Chaplin, R. S., reactivation of adsorbents, (P.), B., 661.
- Griffith, R. H., and Hill, S. G., fuel oils, (P.), B., 1083.
- Hollings, H., and Hutchison, W. K., regeneration of alkaline liquors used for absorption of hydrogen sulphide, (P.), B., 355.
- See also Jenkins, P. G.
- Gascoigne, D. J. See Sterling Metals, Ltd.
- Gascoigne, G. H., and Knox, J. R., liquid-filtering means, particularly for filtering milk, (P.), B., 700.
- Gaskin, J. G. N., reagent for eliminating interference due to calcium in volumetric Fehling's titration for invert sugar, A., 964.
- Gasoline Antioxidant Co. See Bjerregaard, A. P., Calcott, W. S., Hannum, C. W., Rogers, T. H., and Winning, C.
- Gasoline Products Co., Inc., heat-conversion of hydrocarbon oils, (P.), B., 344.
- and Keith, P. C., jun., treatment of hydrocarbon oils, (P.), B., 344.
- See also Black, J. C., Brewster, O. C., Cross, W. M., Dorch, R. F., Keith, P. C., jun., and Widdell, H. E.
- Gaspar, B., preparation of subtractive multicolour [photographic] images (Gaspar colour process), B., 575. Photographic material for producing dye or pigment images, (P.), B., 46. Hydrotype images, (P.), B., 46. Photographic dyestuff images, (P.), B., 126, 206, 382, 575. Recording materials for colour films, (P.), B., 206. Coloured photographic materials, (P.), B., 655, 783, 1024. Multicolour photographic images on coloured and differently sensitised multi-layer photographic material, (P.), B., 1070.
- Gaspar y Arnal, T., sensitive reagent for aluminium; separation of aluminium and beryllium, A., 597.
- Gasquard, L., hot fracture of iron castings, B., 25.
- Gassner, G., and Franke, W., influence of temperature on nitrogen content and rust-resistance of young cereal plants, A., 554. Nitrogen status of young wheat plants in relation to mineral nutrition, B., 117.
- Gassner, G., and Goeze, G., importance of potassium-nitrogen ratio in soils for assimilation, transpiration, and chlorophyll content of young cereal plants, B., 72.
- and Hassebrauk, K., influence of mineral nutrition on sensitivity of standard species used in determining types of cereal rusts, B., 117. Two-year field trials of the influence of manuring on susceptibility of cereal plants to rust, B., 117.
- and Kirchhoff, H., control of smut in wheat by dipping, II., B., 246. Control of barley smut, B., 246.
- Gassner, L., and Deuts. Ges. für Schädlings-Bekämpfung m.b.H., indicating presence of toxic substances [hydrogen cyanide], (P.), B., 336.
- Gastechnik, G.m.b.H., regeneration of gas-purifying masses, (P.), B., 1082.
- Gastel, (Frl.) A. J. P. van. See Wibaut, J. P.
- Gates, F. C., *p*-dichlorobenzene, an effective herbarium insecticide, B., 647.
- Gates, F. L., absorption of ultra-violet radiation by crystalline pepsin, A., 252. Temperature coefficient of inactivation of crystalline pepsin by ultra-violet radiation, A., 252.
- Gates, L. W. See Klarmann, E., and Lehn & Fink, Inc.
- Gatti, D. See Mascarelli, L.
- Gatto, A. See Sarzano, G.
- Gatty, O. See Bell, R. P., and Crazford, S. R.
- Gatty-Kostyal, M., and Kamienski, B., structure of ointments, B., 1163.
- and Tesarz, J., nucleic acid of ergot. I., A., 797.
- Gaubert, P., anisotropy of liquids around gaseous bubbles, A., 283. Anisotropic liquids, A., 565. Anisotropy and structure of sheet glass, B., 307.
- Gaucher, L. P., specific heat of liquid pure hydrocarbons and petroleum fractions, A., 289.
- Gaudenzi, N., "terra rossa" of Emilia, B., 242.
- Gaudin, A. M., staining minerals for easier identification in quantitative mineral-graphic problems, A., 1345.
- Gaudin, O. See Ripert, J.
- Gaudio, V., allantoin during high-purine diet in man, A., 524.
- and Hinrichsen, E., glucoproteins in hepatopathy, A., 1402.
- Gauerke, C. G. See Du Pont de Nemours & Co., E. J.
- Gaujoux, E., Recordier, M., and Andrae, M., hypoglycemia provoked by insulin before and after nephrectomy, A., 1031. Effect of the state of the kidney on activity of insulin, A., 1031.
- Gault, H., and Cogan, M., α -aldehydotropic ester, A., 1364.
- and Wendling, T., acetalic condensations of ethyl acetoacetate with acetaldehyde, A., 65.
- Gaumé, J. See Bailly, O.
- Gaunt, J. H. See Gaunt, R.
- Gaunt, R., Tobin, C. E., and Gaunt, J. H., survival of salt-treated adrenalectomised rats, A., 1413.
- See also Ponder, F.
- Gaunt, W. E., Higgins, G., and Wormall, A., action of benzylcarbonyl chloride on insulin and other proteins, A., 1422.
- Gauthier, J., ter Meulen's methods of organic analysis, A., 506.

- Gauthier-Villars, *P.* See Vallery-Radot, *P.*
 Gautier, *C.*, Ratelade, *J.*, and Casati, *R.*, total nitrogen of liver of frogs in summer and winter and during fasting and administration of nitrogen-rich diet, *A.*, 1004.
 Gauzit, *J.*, emission spectrum of the night sky. II. Ultra-violet extremity, *A.*, 3.
 Gavát, *I. G.* See Nenitzescu, *C. D.*
 Gaverdovskaja, *M. V.*, activity of nickel catalysts, *B.*, 802.
 Gavin, *G.* See McHenry, *E. W.*
 Gaviola, *E.*, and Strong, *J.*, spectrum of aluminium vapour distilled by a tungsten coil in vacuum, *A.*, 1183.
 Gavrilu, *I.*, and Mihaileanu, *G.*, indicanæmia in nephritis, *A.*, 1527.
 Gavrilescu, *N.* See Busnita, *T.*, and Crasnaru, *L.*
 Gavrilova, *M. F.*, reversibility of the vernalisation process, *A.*, 904.
 Gaw, *H. Z.* See Barnes, *T. C.*
 Gawlick, *H.* See Müller, *E.*
 Gawronski, *S.*, complexity of resonance spectrum of selenium, *A.*, 2. Influence of nitrogen on fluorescence spectrum of selenium, *A.*, 2.
 Gawrych, *S.* See Nowakowski, *A.*
 Gawthrop, *D. B.*, velocity of the shock-wave not affected by rate of detonation of an explosive, *B.*, 656.
 Gay, *L.*, and Cerveau, *M.*, interfacial tensions between solutions of palmitic acid in benzene and aqueous solutions of sodium salts, *A.*, 1071.
 Gaydon, *A. G.*, spectrum of afterglow of sulphur dioxide, *A.*, 9.
 and Pearse, *R. W. B.*, band spectrum of nickel hydride: bands at 5713, 6246, and 6424 Å., *A.*, 561.
 Gazzi, *V.*, oxidisability in analysis of mineral waters, *A.*, 462. Spectrographic detection of cesium, rubidium, and potassium, especially in mineral waters; spectrographic analysis in the near infra-red, *A.*, 463.
 Gearing, *M. J.*, Downing, *W. F., jun.*, and Gen. Foods Corp., apparatus for manufacture of salt, (P.), *B.*, 1043.
 Gebauer, *R.* See Eckardt, *A.*
 Gebauer-Fülneegg, *E.*, Moffett, *E. W.*, and Marsene Corp. of America, production of reaction product of butadiene derivatives with hydrogen halides, (P.), *B.*, 962.
 Gebhard, *K.* See Houdremont, *E.*
 Gebhardt, *H.* See Meuwesen, *A.*
 Gebski, *S.*, ichthyol preparations from [Polish] native raw materials, *B.*, 606.
 Geddes, *J. A.*, and Bingham, *E. C.*, fluidity of anisole, *A.*, 290.
 Geddes, *W. F.*, and Eva, *W. J.*, comparative study of the Blish and Sandstedt and a modified Rumsey procedure for estimation of diastatic activity [of flour], *B.*, 1017.
 See also Binnington, *D. S.*, Cook, *W. H.*, and Larmour, *R. K.*
 Gedroitz, *A. I.* See Astapenja, *P. V.*
 Gedroiz, *K. K.*, exchangeable cations in the soil and the plant. III. Influence on crop yields of manganese, aluminium, and certain other metals introduced in varying amounts into the adsorptive complex of soils. IV. Adsorbed ammonium as a nitrogen source for plants, and its influence on the soil, *B.*, 967.
 Gee, *G.*, and Rideal, *E. K.*, kinetics of polymerisation processes, *A.*, 1080.
 Geel, *W.* See Pieters, *H. A. J.*
 Geel, *W. C. van*, electric penetration of thin layers of aluminium oxide in an electrolyte, *A.*, 38. Cuprous oxide rectifiers, *A.*, 188.
 and De Boer, *J. H.*, asymmetric conductivity of the combination: metal-insulating layer-salt layer-adsorbed alkali metal, *A.*, 682. Photo-electric cells with an artificially deposited insulating layer, *A.*, 1191.
 See also De Boer, *J. H.*
 Geer, *P. L.*, recuperative glass-melting tanks, (P.), *B.*, 149.
 and Amco, Inc., glass-melting furnace, (P.), *B.*, 631.
 Moore, *H. A.*, Morton, *W. A.*, and Amco, Inc., melting of glass, etc., (P.), *B.*, 631.
 See also Morton, *W. A.*
 Geer, *W. C.*, and Goodrich Co., *B. F.*, rubber [insulation] composition, (P.), *B.*, 644.
 Geering, *R.* See Fierz-David, *H. E.*
 Geerligs, *H. C. P.*, point of exhaustion of cane molasses, *B.*, 473.
 Geerling, *M. C.*, nitration of monobromotoluenes. II. Influence of cresol, *A.*, 480.
 Gefken, *K.*, determination of biologically important carbohydrates in plant material, *A.*, 673.
 Gehant, *J. C.*, enamels—old and new, *B.*, 239.
 Gehm, *H. W.*, and Heukelekian, *H.*, eosin-methylene-blue agar for rapid direct count of *E. coli*, *A.*, 1283.
 Gehman, *S. D.*, Raman spectrum of rubber, *A.*, 1054.
 Gehn, *H. W.* See Rudolfs, *W.*
 Gehring, *M.* See Binz, *A.*
 Gehrke, *A.* See Schmalfuss, *H.*
 Gehrke, *M.* See Schoeller, *W.*
 Gehrts, *A.*, wandering of adsorbed atoms along the surface of solid bodies, *A.*, 1448.
 and Siemens & Halske A.-G., thermionic cathodes, (P.), *B.*, 507.
 Geib, *K. H.*, and Steacie, *E. W. R.*, exchange reactions with deuterium atoms, *A.*, 1087.
 Geid, *J. P.*, iron catalysts for ammonia synthesis, *B.*, 20.
 Geiger, *G. F.*, and Case, *R. E.*, nickel alloys in the architectural field, *B.*, 1097.
 and Internat. Nickel Co., uniform corrosion [nickel] anodes, (P.), *B.*, 107.
 See also Crawford, *C. A.*
 Geiger, *H.*, and Fünfer, *E.*, classification of radiations in the complete system of cosmic rays, *A.*, 426.
 Geiger, *O.* See Lüers, *H.*
 Geiger-Huber, *M.*, influence of concentration of respiratory materials on respiration rates of plants, *A.*, 670.
 See also Erlenmeyer, *H.*
 Geigy, *J. R.* See I. G. Farbenind.
 Geigy Aktien-Gesellschaft, *J. R.*, dyeing of acetylcellulose and mixed materials containing it, (P.), *B.*, 59. Protection of wool against damage by moths, (P.), *B.*, 98. Removal of iron from acid solutions of aluminium sulphate, (P.), *B.*, 227. Coloured lacquers and coating compositions, (P.), *B.*, 367. Compounds for protection [of textiles] against moths, (P.), *B.*, 444. Leather, *B.*, 470. Tanning substances, (P.), *B.*, 513. Solutions of rubber, (P.), *B.*, 738. Mono-azo-dyes insoluble in water [pigments], (P.), *B.*, 763.
 Geigy Aktien-Gesellschaft, *J. R.*, conversion products of azo-dyes [for dyeing leather], (P.), *B.*, 941. Leather, (P.), *B.*, 964*. Tar products particularly for road construction, (P.), *B.*, 1083. Solutions of rubber and substances resembling rubber, (P.), *B.*, 1104.
 See also Chiera, *G.*
 Geijer, *E.* See Häggglund, *E.*
 Geijer, *P.*, origin of the iron ores of Spanish Morocco, *A.*, 469.
 Geiler, *J.* See Döring, *T.*
 Geiling, *E. M. K.* See Eastman, *N. J.*, and Gemmill, *C. L.*
 Geilmann, *W.*, and Brünger, *K.*, detection and determination of germanium in organic matter, *A.*, 369. Absorption of germanium by plants, *A.*, 552.
 and Wrigge, *F. W.*, analytical chemistry of rhenium. XI. Volumetric determination of rhenium compounds, *A.*, 464. Double salts of rhenium trichloride with rubidium and cesium chloride, *A.*, 946.
 Geinitz, fruit spraying and bee culture, *B.*, 375.
 Geipel, *H.* See Scherer, *R.*
 Geismann, *H.*, detectors, *A.*, 429.
 Geissendörfer, *H.* See Strack, *E.*
 Geissler, *W.*, adhesion between the mineral and binding agent in bituminous road construction, *B.*, 675.
 Geist, *S. H.*, and Spielman, *F.*, antuitrin-S and blood-elements, *A.*, 1544.
 Gelbert, *A.* See Briner, *E.*
 Gelfman, *J. A.* See Loginov, *N. E.*
 Gelikonova, *O.* See Skljarenko, *S. I.*
 Gelin, *E.* See Kling, *A.*
 Gelineo, *S.*, basal metabolism and prolonged exogenous hyperthermia, *A.*, 1013.
 Gelinsky, *E.*, medical and cosmetic preparations and disinfectants, (P.), *B.*, 701.
 Geller, *F. C.*, and Schuster, *Ch.*, vitamin-E, *A.*, 129.
 Geller, *L. W.*, and Will & Baumer Candle Co., Inc., moulding of beeswax candles, (P.), *B.*, 319.
 Geller, *R. F.*, and Creamer, *A. S.*, talc in whiteware bodies of the wall-tile type, *B.*, 992.
 Geller, *W.* See Bardenheuer, *P.*, and Köster, *W.*
 Gellhorn, *E.*, influence of parathormone on the neuro-muscular system: an experimental analysis, *A.*, 1423.
 and Moldavsky, *L. F.*, effect of p_{H_2} on absorption of sugars, *A.*, 391.
 Gelmroth, *W.* See Hüchel, *W.*
 Gelperin, *I. I.*, and Rips, *S. M.*, calculations of heat capacities of gases at high pressures and temperatures, *A.*, 437.
 Gemant, *A.*, dipole rotation in solid non-crystalline materials, *A.*, 685. Complex viscosity, *A.*, 1065. [Electrical] conductivity of oils and waxes, *B.*, 660.
 and Southwell, *R. V.*, measuring viscosity of a liquid, (P.), *B.*, 1077.
 Gemmill, *C. L.*, respiratory quotient of frog's muscle under conditions of rest and work, *A.*, 890.
 Geiling, *E. M. K.*, and Reeves, *D. L.*, respiratory effect of prolonged anoxæmia in normal dogs before and after denervation of the carotid sinuses, *A.*, 371.
 and Holmes, *E. G.*, formation of carbohydrate from fat in liver of the rat, *A.*, 523.

- Genard, *J.*, effect of a magnetic field on fluorescence of diatomic molecules of selenium, *A.*, 675. Effect of a magnetic field on absorption bands of sulphur, *A.*, 1045.
- General Aniline Works, Inc., and Bayer, *O.*, pure 1-amino-2,3-dimethylanthraquinone, (P.), *B.*, 941.
- and Kuhrmann, *F.*, perylene, (P.), *B.*, 840.
- and Sigwart, *A.*, normal ferrous salt of 2-nitronaphthalene-4:8-disulphonic acid, (P.), *B.*, 622.
- Gen. Chemical Co., and Dickson, *W. M.*, insecticide, (P.), *B.*, 648.
- and Harkness, *A. M.*, apparatus for treating gases [in sulphuric acid manufacture], (P.), *B.*, 629.
- and MacDonald, *C. A.*, [dust catcher for pyrites] concentrate burner, (P.), *B.*, 1043.
- and Merriam, *H. F.*, sulphuric anhydride, (P.), *B.*, 991.
- Mullen, *E. J.*, and Allen, *W. S.*, treatment of gases [with acids], (P.), *B.*, 544.
- and Stringham, *W. S.*, treatment of [pyritic] ore by flotation, (P.), *B.*, 1098.
- Gen. Development Laboratories, Inc. See Sperti, *G.*
- Gen. Electric Co., Adams, *G. F.*, Douglas, *R. W.*, and Partridge, *J. H.*, refractory glasses, (P.), *B.*, 496.
- and Alexander, *P. P.*, spraying of powdered material, (P.), *B.*, 578.
- and Bergman, *S. R.*, centrifuge buckets, (P.), *B.*, 787.
- and Caplan, *M. C.*, annealing of alloys [brass strip or wire], (P.), *B.*, 155.
- and Christensen, *E. F.*, electric furnace system, (P.), *B.*, 29.
- and Clark, *F. M.*, [liquid] composition for dielectric use, (P.), *B.*, 193. Oil for transformers, etc., (P.), *B.*, 1128.
- Composition for retarding sludge formation [in insulating oil], (P.), *B.*, 1128.
- and Dantsizen, *C.*, prevention of corrosion [of metals] and corrosion-resisting joints, (P.), *B.*, 811. Detection of leaks in refrigerating systems [using dichlorodifluoromethane], (P.), *B.*, 1074.
- and Devers, *P. K.*, vitreous [electrical insulating] material, (P.), *B.*, 993.
- and Dumas, *R.*, filter for liquid and gas substances, (P.), *B.*, 787.
- Ewest, *H.*, and Gaidies, *G.*, gaseous electric-discharge device [glow-discharge tube], (P.), *B.*, 911.
- and Harty, *E. A.*, tellurium alloy rectifier, (P.), *B.*, 911.
- and Haskell, *O. S.*, [electric resistance] furnace, (P.), *B.*, 773.
- and Heisler, *C. L.*, centrifugal machine, (P.), *B.*, 532.
- and Horstkotte, *E. H.*, [copper alloy spot] welding electrode, (P.), *B.*, 682.
- and Hovey, *A. G.*, cementing composition [adhesive], (P.), *B.*, 420.
- and Ipsen, *C. L.*, [heat treatment] furnace, (P.), *B.*, 786.
- Ipsen, *C. L.*, and Cox, *R. E.*, furnace, (P.), *B.*, 385.
- and Jackson, *A. B.*, separation of minerals [tale from magnesite] by flotation, (P.), *B.*, 673.
- and Jennings, *J. H.*, furnace, (P.), *B.*, 337.
- and Keelan, *R. E.*, plant for obtaining gas from the atmosphere, (P.), *B.*, 948.
- and Kelley, *F. C.*, [bright] annealing of [stainless] steel, (P.), *B.*, 193.
- Gen. Electric Co., and Marshall, *A. L.*, [combustible] gas detector, (P.), *B.*, 793.
- and Marshall, *C. H.*, apparatus for handling granular or lumpy material, (P.), *B.*, 754.
- and Matsushima, *K.*, [anode for] X-ray tubes, (P.), *B.*, 507.
- and Mayr, *O.*, liquid for electrical purposes and apparatus containing same, (P.), *B.*, 558.
- Metcalf, *G. F.*, and Kling, *A. J.*, selenium [light-sensitive] tubes, (P.), *B.*, 911.
- and Millner, *T.*, electric incandescence lamp, (P.), *B.*, 193.
- and Morrill, *W.*, preventing ageing in silicon-steel sheets, (P.), *B.*, 907.
- and Nerad, *A. J.*, mercury boiler, (P.), *B.*, 386. Mercury-vapour generator, etc., (P.), *B.*, 386.
- Nerad, *A. J.*, and Newkirk, *B. L.*, cleaning of mercury boilers, (P.), *B.*, 386.
- and Nunn, *C. H.*, induction furnace arrangements, (P.), *B.*, 29.
- and Patent-Treuhand Ges. f. elek. Glühlampen m.b.H., introducing luminescent materials into electric [discharge] lamps, (P.), *B.*, 958.
- and Pfannkuch, *W.*, high-voltage cable, (P.), *B.*, 910.
- Randall, *J. T.*, Harris, *N. L.*, and Ryde, *J. W.*, electron-discharge tubes, (P.), *B.*, 1149.
- and Ruder, *W. E.*, [aluminium-nickel-iron] permanent magnet and its manufacture, (P.), *B.*, 275.
- and Rupp, *E.*, [electrical] device for analysing the structure of matter, (P.), *B.*, 596. Electric current rectifier, (P.), *B.*, 639, 682.
- and Ryde, *J. W.*, luminous electric-discharge tubes, (P.), *B.*, 812. Electric discharge lamps, (P.), *B.*, 812.
- and Safford, *M. M.*, resinous composition, (P.), *B.*, 816.
- and Schlingman, *P. F.*, refrigerating system, (P.), *B.*, 49. [Amine-aldehyde] resins, (P.), *B.*, 1005.
- and Singer, *H.*, furnace [heat-storage system], (P.), *B.*, 786.
- and Warner, *D. F.*, regulating evaporators and similar apparatus, particularly in connexion with elastic-fluid turbine plants, (P.), *B.*, 610.
- Gen. Electric Vapor Lamp Co. See Mailey, *R. D.*
- Gen. Foods Corporation. See Gearing, *M. J.*
- Gen. Fuel Briquette Corporation. See Zwoyer, *E. B. A.*
- Gen. Manganese Corporation. See Sweet, *A. T.*
- Gen. Mills, Inc. See Blish, *M. J.*
- Gen. Motors Corporation. See Boegehold, *A. L.*, Henne, *A. L.*, Midgley, *T. jun.*, and Seabury, *R. L.*
- Gen. Motors Research Corporation. See Wirshing, *R. J.*
- Gen. Plastics, Inc. See Norton, *A. J.*
- Gen. Reduction Corporation. See Smith, *William Henry.*
- Gen. Rubber Co. See Rose, *R. P.*
- Gen. Salt Co. See Girvin, *C. W.*
- Gen. Scientific Corporation. See Miesse, *R. E.*
- Gen. Water Treatment Corporation. See Dotterweich, *A. J.*
- Gen. Zeolite Co. See Behrman, *A. S.*
- Genet, *P.* See Chrétien, *A.*
- Genevois, *L.*, flavin of white wines, *B.*, 203.
- Iron complexes in wines, *B.*, 1113.
- and Creac'h, *P.*, action of 2:4-dinitrophenol on American baker's yeast (Fleischmann yeast), *A.*, 785.
- and Espil, *L.*, extraction of zymoflavin by methylal, *A.*, 253.
- and Mandillon, *G.*, complexes formed by bromoacetic acid and organic bases and toxins, *A.*, 780.
- and Pavlov, *M.*, fermentable sugars of wheat flour, *A.*, 550.
- and Saric, *R.*, action of dinitrophenols on respiration of yeasts and lactic bacilli, *A.*, 253. Action of 2:4-dinitrophenol on French baker's yeast (Springer's yeast), *A.*, 785.
- Gengou, *O.*, amino-acids and *Staphylococcus* toxin, *A.*, 1168.
- Genin, *G.*, painting and preservation of cement and concrete, *B.*, 150.
- Gensamer, *M.* See Barrett, *C. S.*, and Mehl, *R. F.*
- Genesche, *W.*, and Amer. Lurgi Corp., refining of vegetable and animal oils and fats, (P.), *B.*, 417.
- Genstein, *E. S.*, and Newman, *S.*, manufacture of sizing compounds and sizing of viscose and acetate yarns, *B.*, 588.
- Gent, *K. T.* See Du Pont de Nemours & Co., *E. I.*
- Genter, *A. L.*, deamination of sewage sludges, *B.*, 431.
- Gentil, *A. J.*, requirements of lubricants for various industrial purposes, *B.*, 54.
- Gentner, *W.*, disintegration of beryllium by γ -rays, *A.*, 141. Disintegration of beryllium by γ -rays; absorption of neutrons emitted; effective cross-section of γ -rays, *A.*, 277.
- Genz, *F. W.*, and Virginia-Carolina Chem. Corp., fertiliser, (P.), *B.*, 423.
- Geoffroy, *R.*, action of top yeast on levosin in solution and during bread-making, *A.*, 1027. Carbohydrate content of wheat grains and flours, *B.*, 121.
- and Labour, *G.*, action of proteolytic enzymes on wheat flour, *B.*, 330.
- Geoghegan, *G.*, spectral reflexion density of white metals, *B.*, 175.
- Georg, *A.*, configuration of *isosucrose* (sucrose-*D* of Pictet and Vogel) and a peculiarity of β -glucosidase of mushrooms, *A.*, 69.
- George, *H.*, graphite-resistor radiation furnaces and their applications to high temperatures, *B.*, 1052.
- George, *W. H.*, intensity of polarised X-rays, *A.*, 1046. Sub-boundaries in a crystal grown by the Bridgman method, *A.*, 1449.
- George, Ltd., *W. & J.* See Smith, *S.*
- Georgescu, *I.* See Nitzeșcu, *I. I.*
- Georgescu, *R.* See Soare, *A. G.*
- Georgi, *C. D. F.*, chemical composition of fodder plants from Cameron Highlands, *B.*, 1162.
- Georgiev, *A.*, and Aerovox Corp., electrolytic [condenser] cell, (P.), *B.*, 415.
- Georgievski, *S.*, and Andreev, *S.*, dependence of amylolytic power of intestinal juice on the type of diet, *A.*, 1267.
- Geppert, *R.*, and Dietzel, *A.*, devitrification constants of potash-lead-silicate glasses along the lead-glass line, *B.*, 850.
- Gerapostolou, *B. G.* See McKee, *R. H.*
- Gerard, *I. J.*, and Sutton, *H.*, corrosion-fatigue properties of duralumin with and without protective coatings, *B.*, 313.
- Gérard, *M.* See Dufraisse, *C.*

- Gerard, R. W. See Shaffer, M.
- Gerasimov, I. P., and Ivanova, E. N., process of continental salt accumulations in soils, rocks, underground water and lakes in W. Siberia, B., 164.
- Gerasimova, N., η_{sp} as a control method in the kaolin industry, B., 22.
- Gerber-Ritter, J., [electrical] prevention of incrustation in boilers, etc., (P.), B., 755.
- Gerbes, W., ionisation effect of cathode rays in air, A., 1293.
- Gerehikov, M. G. See Salkind, J. S.
- Gerecs, A. See Zemplén, G.
- Gerhard, A., pytalín content of human saliva, A., 105.
- Gerhart, H. L. See Suter, C. M.
- Gericke, S., distribution and action of phosphatic fertilisers, B., 602. Solubility of the phosphoric acid of various [fertiliser] phosphates, B., 821.
- Gerin, C., chemo-toxicology of hydrocyanic acid, A., 896. Toxicology of phenols, A., 1159.
- Gering, K., and Sauerwald, F., internal friction of fused metals and alloys. VI. Internal friction of Pb, Cd, Zn, Ag, Sn, K, Na; structure viscosity of amalgams, A., 927.
See also Sauerwald, F.
- Gerke, F. K., and Kardakova, Z. I., determination of sulphur in ferrous alloys, and simultaneous determination of carbon and sulphur in a sample, B., 272.
- Gerke, R. H., and Morgan & Wright, treatment of rubber, (P.), B., 1006.
- Gerking, D. V., lithographic process, (P.), B., 334.
- Gerlach, M., crop-improving action of mixtures of superphosphate and calcium cyanamide, B., 866.
- Gerlach, Walther, spectral analysis as accessory in material testing and production, A., 1094. Magnetic testing of [metallic] materials [for flaws], B., 1146.
and Gerlach, Werner, application of emission spectrum analytical methods to problems of social medicine, A., 235.
and Riedl, E., spectro-analytical investigations. XIII. Spectrographic test of purity of the new primary radium standard, A., 141.
- Gerlach, Werner, argyrosis, especially of the eyes, A., 399. Copper content of human and animal organs, A., 883. Spectrographic investigation of gold distribution following gold therapy in men and animals, A., 1528.
and Müller, R., occurrence of strontium and barium in human organs and excreta, A., 883.
See also Gerlach, Walther.
- Gerlough, T. D., and White, W., factors influencing rate of thermal destruction of the tetanus antitoxin of antitetanic horse plasma at 60–66°, A., 1169.
- Germain, L., sodium phosphate and protection of boilers against scaling, B., 257.
- German, J. L. M. See Benjamins, C. E.
- German, S. See Lozinski, N.
- German, W. L., and Vogel, A. I., dissociation constants of organic acids. XII. New buffer: phenylacetic acid-sodium phenylacetate, A., 1076.
- German Steel Manufacturers Association, Materials Committee, molybdenum high-speed steels with low tungsten content, B., 1047.
- Germann, F. E. E. See James, T. H., and Long, C. C.
- Germer, L. H., electron diffraction camera, A., 839.
- Gerner-Rasmussen, A., preservation of fruits, (P.), B., 1163.
- Gernes, D., cuprous chloride, (P.), B., 900.
- Gernet, D. V., and Chitun, A. M., effect of adding oxides of different metals on activity of tin-chromium catalysts, A., 1209.
See Adadurov, I. E.
- Gerngross, O. See Lockemann, G.
- Gerö, L., Λ_{PII} state of CO, A., 561. Perturbation and predissociation in the $b^2\Sigma$ term of the CO band spectrum, A., 1188. Perturbations in the second positive nitrogen bands, A., 1437.
See also Schmid, R.
- Géróna, F. S., vitamins of olive oil, A., 260.
- Gerritz, H. W., method for preparing biological materials for phosphorus determinations, A., 906. Digesting biological materials for calcium and phosphorus analysis, A., 1044.
- Gerry, E., and Hall, J. A., biochemical phases of oleoresin production, A., 1549.
- Gerry, H. T. See Mulliken, S. P.
- Gerschenovitch, Z. S. See Fomin, S. V., and Tschagovetz, R.
- Gerschman, R. See Marenzi, A. D.
- Gersdorff, W. A., comparison of toxicity with concentration and time, A., 1275. Quantitative relationship between the constitution and toxicity of rotenone derivatives, A., 1275.
- Gershinowitz, H., (C-C)_{diam.} linking energy, A., 1448.
and Eyring, H., theory of termolecular reactions, A., 937.
See also Eyring, H., and Rice, O. K.
- Gerson, K., oxygen-generating or cooling substances, (P.), B., 148.
- Gertschuk, M. P. See Knaunjan, J. L.
- Gervart, I. G. See Bart, E. V.
- Gervay, W. See Schulek, E.
- Gesellschaft für Kohlentechnik m.b.H., separation of mixtures comprising water-soluble amino-acids and ammonium sulphate, (P.), B., 1085.
See also Klempt, W.
- Ges. für Linde's Eismaschinen Akt.-Ges., separation of low-boiling gas mixtures, (P.), B., 290.
and Krause, G. A., resolution of solutions or liquid mixtures into their constituents by cooling and crystallisation, (P.), B., 754.
See also Krause, G. A.
- Ges. zur Verwertung Fauth'scher Patente m.b.H., dehydration of water-containing or water- and oil-containing materials, (P.), B., 109.
- Geslin, M., ratio argon:nitrogen in natural gases, A., 724. Influence of a current of hot water on air and radon dissolved in cold water, A., 928. Partition coefficient of radon between gases and water from springs, A., 953.
- Gessel, K. M. van, De Boer, J. H., and Radio Corp. of America, electric-discharge tube, (P.), B., 316.
See also De Boer, J. H.
- Gessler, A. E., and Zinsser & Co., Inc., pigment [in-oil dispersion], (P.), B., 1152.
- Gesteau, P. See Bedel, C.
- Geszner, M. See Kiss, A. von.
- Getman, T. E. See Shirov, N. F.
- Getting, I. A. See Compton, A. H.
- Getz, C. A. See Gieseke, J. E.
- Gevaert Photo-Production, Naamloze Venootschap. See Hallo, J. H.
- Gevelson, T. A., rôle of vegetation in process of continental salt accumulation, B., 164.
- Gewecke, F., and Käst, O., comparative tests with wood protectives (against fire, rot, and insects), B., 769.
- Gewehr, R. See Fischer, W.
- Gewerkschaft M. Stinnes, desulphurisation of motor fuels, (P.), B., 441.
- Gewerkschaft Victor Stickstoffwerke, apparatus for making a fertiliser which can be applied by scattering, (P.), B., 39.
- Geyer, W. O., chemical laboratory apparatus, (P.), B., 611.
- Gezelius, R. A. See Briggs, C. W.
- Ghantus, M. See Avery, B. F.
- Ghatak, N., thevetin, crystalline glucoside of *Thevetia nerifolia*, A., 735, 1110. Seed kernels of *Casatpinia bonducella*, A., 1180.
- Gheller, E. See Cernătescu, R.
- Gheorghiu, C. V., derivatives of 4-hydroxy-2-thion-1:2:3:4-tetrahydroquinazoline and the phenomenon of their colour, A., 630.
and Manolescu, (Mle.) L., heteropolar compounds: complex salts of silver and mercury with 4-hydroxy-2-thion-1:2:3:4-tetrahydroquinazoline, A., 1253.
- Gheorghiu, D. See Salceanu, C.
- Ghijsen, W. L., jun. See Meyer, Gerrick.
- Ghimicescu, G. See Sumuleanu, C.
- Ghimpu, V., tobacco diseases due to physiological changes, B., 822.
- Ghiron, D. See Levi, G. R.
- Ghitescu, V. See Bertrand, G.
- Ghose, M. N., and Bhattacharjee, S. N., polarimetric determination of physiological activity of hemp resin, A., 1157.
and Pal, H. K., colour reactions for identification of hydrogenated fish oils, B., 560.
- Ghose, R., intermediates for synthesis of phenanthrene, A., 1495.
- Ghose, T. P., Krishna, S., Narang, K. S., and Rây, J. N., oxidation products of vasine with hydrogen peroxide, A., 1513.
- Ghosh, A. R., and Guha, B. C., vitamin-A values of Indian fish-liver oils determined biologically and tintometrically, A., 1428.
See also Guha, B. C.
- Ghosh, B. See Chakravarti, D.
- Ghosh, B. N., and Guha, B. C., electrical transference of vitamin-B₁ in aqueous solution, A., 1175.
See also Sinton, J. A., and Wats, R. C.
- Ghosh, D. N., liquid-liquid junction, A., 598.
- Ghosh, J. C., and Ganguli, S. C., redox potential of glutathione, A., 1265.
- Narayanamurthi, D. S., and Roy, N. K., photochemical oxidation of mandelic acid by methylene-blue with uranyl nitrate as photo-sensitiser, A., 1211.
and Rakshit, P. C., oxidation of sugars by air in presence of ceric hydroxide sol and cerous hydroxide gels, A., 1329.
and Sen, S., synthesis of higher paraffins from water-gas; use of promoters for activating iron-copper catalyst, B., 484.
- Ghosh, M., electron scattering by atoms, A., 1047.
- Ghosh, N. N. See Rây, (Sir) P. C.
- Ghosh, R., synthesis of hexahydro-coumaranone, A., 1503.
- Ghosh, S. See Chopra, R. N.

- Giacalone, A., synthesis of quinoline derivatives, A., 758. Eight-membered heterocyclic nuclei, A., 760.
[with Collesano, G.], relation between chemical constitution and taste, A., 780.
- Giacomello, G., oxidation of organic substances as a means of investigating their constitution [oxidation of acetic acid by hydrogen peroxide], A., 472. Constitution of sulphur monochloride, and derivatives of the hypothetical acid (S-OH)₂, A., 614. Electrolysis of organic substances in non-aqueous media, I., A., 1349.
- Giaja, J., and Markovic, L., respiration of yeast, A., 1027.
- Giauque, W. F., and MacDougall, D. P., heat capacity of gadolinium sulphate octahydrate below 1° abs., A., 156. Production of temperatures below 1° abs. by adiabatic demagnetisation of gadolinium sulphate, A., 1096.
See also Blue, R. W.
- Gibb, R. F., diluting cylinder for sugar analysis, B., 249.
- Gibbon, S. H., treatment of rice, rice offals, paddy, etc., (P.), B., 285.
- Gibbons, H., examination of urine in renal disorders, A., 238.
- Gibbons, J. J., jun., and Bartlett, J. H., jun., magnetic moment of the K³⁹ nucleus, A., 804.
See also Bartlett, J. H., jun.
- Gibbons, J. T., and Bancroft & Sons Co., J., finishing of textile fabrics, (P.), B., 989.
- Gibbons, P. A., semi-ebonite, I., B., 685.
- Gibbons, W. A., McCollm, E. M., and Naugatuck Chem. Co., [production of synthetic rubber by] polymerisation of diene hydrocarbons, (P.), B., 163.
- Gibbons, W. E. See Gibbons Bros., Ltd.
- Gibbons Bros., Ltd., muffles, (P.), B., 257.
Cook, N. G., and Vernon, H., machines for cutting or breaking coke and other material, (P.), B., 434.
and Gibbons, W. E., muffles, (P.), B., 901.
- Gibbs, C. F., and Marvel, C. S., quaternary ammonium salts from bromopropylidialkylamines. V. Conversion of cyclic ammonium salts into linear polymerides, A., 965.
- Gibbs, E. L. See Gibbs, F. A.
- Gibbs, E. M. See Henry, T. A.
- Gibbs, F. A., Gibbs, E. L., and Lennox, W. G., changes in human cerebral blood-flow consequent on alterations in blood-gases, A., 1391.
- Gibbs, J. G., club-root control: cabbage seed beds, B., 742.
- Gibbs, O. S., alleged occurrence of acetylcholine in saliva, A., 1399.
- Gibbs, R. C., and Williams, Robley C., electronic at. wt. and e/m ratio, A., 144.
See also Dorr Co., Inc., Ruedy, J. E., Shaw, R. W., and Williams, Robley C.
- Gibbs, R. D., wood. I. The cell-wall. II. Water content of Canadian trees and changes in the water-gas system during seasoning and flotation. III. Physiology of the tree with special reference to ascent of sap and movement of water before and after death, A., 1179. Toxicity of normal aliphatic alcohols. I., B., 326.
- Gibby, C. W., and Addison, C. C., automatic device for recording drop numbers in interfacial tension measurements, A., 952.
- Gibertini, G., cryoscopy of milk [as determined] with Winter's apparatus, B., 285.
- Gibson, A. J., natural resins, B., 33.
- Gibson, C. S. See Burawoy, A.
- Gibson, D. T., action of Grignard reagents on aromatic sulphonyl fluorides, A., 739.
and Caulfield, T. H., micro-volumetric determination of sulphur in organic compounds containing halogen and nitrogen, A., 1258. Micro-volumetric determination of methoxyl, A., 1516.
- Gibson, G. B. See under Sonbert Machine Co.
- Gibson, G. E., and Macfarlane, A., absorption spectrum of arsenic, A., 136.
See also Fowler, R. D.
- Gibson, G. K. See under Sonbert Machine Co.
- Gibson, K. S., filter for obtaining light at wave-length 560 mμ, A., 912.
and Haupt, G. W., standardisation of Lovibond red glasses in combination with Lovibond 35 yellow, A., 466.
- Gibson, O., repair and maintenance of vertical gas retorts, B., 340.
- Gibson, R. B. See Andersch, M., and Clark, B. B.
- Gibson, R. E., influence of concentration and nature of solute on compressions of aqueous solutions, A., 443. Compressions and specific volumes of aqueous solutions of resorcinol and methyl alcohol at 25° and behaviour of water in these solutions, A., 1317.
- Gibson, R. O., Fawcett, E. W., and Perrin, M. W., effect of pressure on reactions in solution. I. Sodium ethoxide and ethyl iodide to 3000 kg. per sq. cm. II. Pyridine and ethyl iodide to 8500 kg. per sq. cm., A., 1082.
- Giedosz, B., thyrotropic substances in human urine, A., 1007.
- Giedroyc, W., influence of electrolytes on pH of gelatin solutions, A., 300.
See also Przylecki, S. J. von.
- Gieger, M. See Sheets, O.
- Gieslesen, J., line absorption spectra of some salts of the transition elements, especially of cobalt and manganese, A., 679.
- Gier, J. R. See Austin, C. R.
- Giertz-Hedström, S., measurement of heat of hydration of cement by heat of solution principle, B., 547.
- Gies, J. R., and Internat. Precipitation Co., electrical precipitation apparatus [for gases], (P.), B., 67.
- Giesberger, G., salivary, pancreatic, and "Aspergillus" amylase as mixtures of two enzymes, A., 783.
- Giese, A. C., and Leighton, P. A., long wavelength limit of photochemical action in the ultra-violet, A., 537. Photochemical effects of quartz ultra-violet radiation on *Paramecium*, A., 782.
- Giesecke, F., manuring of soils in dry climates. IX. Turkey, B., 515.
- Giesecke, F. O., and Internat. Patents Development Co., [cold-swelling] starch product, (P.), B., 1065.
- Gieseking, J. E., Snider, H. J., and Getz, C. A., destruction of organic matter in plant material by nitric and perchloric acids, A., 1044.
- Gigante, D., action of insulin in fasting pigeons, A., 1543.
- Gilbart, K. C. See Stansfield, E.
- Gilbert, B. E., and Pember, F. R., tolerance of weeds and grasses to toxic aluminium, B., 821.
- Gilbert, C. W. See Cockerott, J. D., and Dee, P. I.
- Gilbert, E. C., and Cobb, A. W., hydrazine: heats of solution of hydrazonium salts at 25°, A., 303.
See also Cobb, A. W.
- Gilbert, H. N. See Du Pont de Nemours & Co., E. I.
- Gilbert, M. D., smoke-treating apparatus, (P.), B., 388.
- Gilbert, R. A. See under Phoenix Supply Co.
- Gilbert, W. P., higher terms in spectrum of Ag II, A., 907. Rht-like isoelectronic sequence to spectrum of Ag III, A., 1292.
- Gilbert, W. P., chromatates, (P.), B., 269.
- Gilbertson, L. A. See Lewis, H. F.
- Gillcreas, F. W., action of water on materials for service pipes, B., 784. Colorimetric determination of dissolved oxygen [in water], B., 1072.
- Gilde, S., determination of traces of bromine in presence of chlorine, A., 1214.
- Gile, P. L., absorption of nitrates by corn in the dark, A., 1037.
- Giles, C. H. See Rowe, F. M.
- Giles, R. N. See Standard Oil Co.
- Giles, W. R. See Pasternack, R.
- Gilford, C. L. S., factors influencing the cataphoresis of small particles in water, A., 698.
- Giliberti, P. See Scaffidi, F.
- Gill, A. F., and Way, T. H., [plaster formation by] treatment of hydrated lime with aluminium sulphate, B., 726.
- Gill, A. S., cadmium-base bearing metals, B., 459.
- Gill, E. T., and Goodacre, R., fatigue properties of patented steel wires. II. Effect of low-temperature heat treatment, B., 1046.
- Gill, E. W. B. See Marconi's Wireless Telegraph Co.
- Gill, H. S. Y. See Turner, W. E. S.
- Gill, J. F. See Bailey, H. H.
- Gill, J. R. See Gronningsater, A.
- Gill, L. O. See French, A. H.
- Gillam, A. E., spectrometric measurements on carotenoids, A., 1052.
and Heilbron, J. M., vitamin-A-active substances in egg-yolk, A., 792.
and Ridi, M. S. E., carotenoids and vitamin-A in cow's blood-serum, A., 1545.
See also Booth, R. G.
- Gillaspie, A. G. See Hauser, C. R.
- Gille, G., experiments with the Kunsman anode, A., 147.
- Gille, R. See Benhamou, E.
- Giller, O. K., determination of usefulness of limestones for producing calcium bisulphite solutions by the tower method, B., 221.
- Gilles, E., sterilisation by ultra-violet emissions from a high-tension lamp, A., 788.
- Gillespie, H. B., identification of alkyl halides; N-alkyl-p-bromobenzenesulphon-p-anisidides, A., 193.
- Gillespie, J. H., biological significance of linkings in adenosinetriphosphoric acid, A., 244.
- Gillespie, James H., obtaining fibre from flax or other fibrous plants, (P.), B., 669.
- Gillett, H., and Detroit Steel Products Co., [coloured] asbestos article, (P.), B., 102.
- Gillett, T. R. See Holven, A. L.
- Gillette, H. S., soil tests useful in determining quality of caliche, B., 513.

- Gillette Research Corporation, burning of limestone and similar materials and recovering carbon dioxide, (P.), B., 452.
- Gillette Safety Razor Co. See Stargardt, A. R.
- Gillier, R., lactic gelling of serum not specific for cancer, A., 775.
- Gillies, J. F., conduction through transformer oil at high field strengths, B., 731.
- Gillieson, A. H. C. P., Kermack, W. O., and Spragg, W. T., conversion of 3-nitro-4-methylphenylarsinic acid into 3-amino-4-carboxyphenylarsinic acid by intramolecular dismutation, and action of hydrobromic acid on *m*-arsanilic acid and 3-amino-4-carboxyphenylarsinic acid, A., 768.
- Gilligan, D. R., Abrams, M. I., and Stern, B., carbohydrate metabolism in human hypothyroidism induced by total thyroidectomy. I. Glucose-tolerance curve and fasting serum-sugar concentration, A., 888.
- Berlin, D. D., Volk, M. C., Stern, B., and Blumgart, H. L., therapeutic effect of total ablation of normal thyroid on congestive heart failure and angina pectoris. IX. Post-operative parathyroid function; serum-calcium and -phosphorus, A., 516.
- Volk, M. C., and Blumgart, H. L., chemical and physical relation between blood serum and body-fluids. I. Nature of oedema fluids and evidence regarding the mechanism of oedema formation, A., 385.
- Volk, M. C., Davis, D., and Blumgart, H. L., therapeutic effect of total ablation of normal thyroid on congestive heart failure and angina pectoris. VIII. Relationship between serum-cholesterol values, basal metabolic rate, and clinical aspects of hypothyroidism, A., 236.
- See also Abrams, M. I., and Stern, B.
- Gilliland, E. R., design calculation for multicomponent rectification, B., 529.
- Gillis, J., and Swenden, J., electrolysis of metals during simultaneous scraping of anode and cathode by a diamond, A., 456.
- Gillman, A. H. See Albion Sugar Co.
- Gillot, P., and Tucakov, Y., tanning materials, B., 419.
- Gilman, A. See Himwich, H. E., and Roe, J. H.
- Gilman, H., Brown, G. E., Bywater, W. G., and Kirkpatrick, W. H., dibenzofuran [diphenylene oxide]. III. Nuclear substitutions, A., 91.
- and Burtner, R. R., orientation in the furan series. X. Anomalous Friedel-Crafts reactions, A., 866.
- Burtner, R. R., Calloway, N. O., and Turek, J. A. V., jun., Friedel-Crafts reaction with nitro-compounds, A., 867.
- Bywater, W. G., and Parker, P. T., dibenzofuran [diphenylene oxide]. IV. Orientation and relative aromaticities of the 2-, 3-, and 4-dibenzofuryl radicals, A., 867.
- Calloway, N. O., and Burtner, R. R., orientation in the furan series. IX. Friedel-Crafts reaction with 2-furaldehyde, A., 866.
- Catlin, W. E., and Davis, R. K., ionisation constants and parachors of some furan compounds, A., 1306.
- Gilman, H., and Kirby, R. H., simplified preparation of activated magnesium for Grignard reagents, A., 1111.
- and Kirkpatrick, W. H., furan arsenicals, A., 228.
- Oatfield, H., and Kirkpatrick, W. H., decarboxylation of furantetracarboxylic acid, A., 1376.
- Wal, R. J. V., Franz, R. A., and Brown, E. V., orientation in the furan series; Hill's 3:5-dibromo-2-furoic acid, A., 985.
- Wooley, B. L., and Vanderwal, R. J., nuclear condensations of furan, A., 219.
- and Young, R. V., dibenzofuran [diphenylene oxide]. V. Dimetalation, A., 985.
- Zoellner, E. A., Dickey, J. B., and Selby, W. M., relative rates of formation of some organomagnesium and organolithium compounds, A., 939.
- Zoellner, E. A., Selby, W. M., and Boatner, C., yields of organomagnesium and organolithium compounds, A., 1112.
- See also Calloway, N. O.
- Gilmore, B. H., utility of sodium hexameta-phosphate as an adjuvant to soap in detergent operations, B., 462.
- Gils, G. E. van, theoretical considerations on micro-cathaphoresis, A., 579.
- Gimmelman, G. A., and Neiman, M. B., spark ignition of methane-oxygen mixtures, A., 172.
- Ginglinger, A. See Wolff, E.
- Gingrich, N. S. See Hultgren, R.
- Ginnell, J. P. See Leonard, A. G. G.
- Ginnings, P. M., and Dees, M., ternary systems water, allyl alcohol, and salts at 25°, A., 935.
- Ginsberg, A. S., Selivanov, B. P., and Nikoliski, S. I., system $\text{MnO}_3\text{SiO}_2\text{-FeS}$, A., 1077.
- Ginsburg, E. See West, William.
- Ginsburg, J. M., control of mealy bugs and other resistant insects on hardy plants with a completely refined petroleum distillate, B., 327.
- New wetting agents for old insecticides, B., 743.
- Mosquito larvicides, B., 1167.
- and Granett, P., derris insecticides. II. Insecticidal properties of extracted root residue, B., 247.
- Arsenical substitutes [insecticides]. I. Chemicals tested in 1934, B., 968.
- Schmitt, J. B., and Granett, P., derris insecticides. I. Toxicity of various extracts of derris root to sucking and chewing insects, B., 247.
- Utilisation of a completely refined low-boiling petroleum distillate in controlling insects infesting chrysanthemum and other plants, B., 778.
- Ginsburg, (Mlle.) S., and Pringsheim, H., removal of phosphoric acid in qualitative micro-analysis, A., 1337.
- Ginsburg-Karagitscheva, T., and Rodionova, K., biochemical processes in deep-sea mud, A., 406.
- Ginzburg, A. A. See Iljinski, V. P.
- Ginzburg, L. F., determination of sulphite-cellulose tannides in presence of vegetable (oak) tanning substances, B., 241.
- Ginzburg, S. S., determination of potassium carbonate in potash, B., 268.
- Gioebel, G., manuring of newly cultivated soils, B., 515.
- Gionne, V. See Barbiani, A.
- Giordani, M., Greeff's method for determination of small quantities of fluorine, A., 53.
- Citric fermentation, A., 662.
- Respiratory pigment of *Aspergillus niger*, A., 662.
- Chlorination of methane, B., 617.
- Giordano, G. B., action of morphine on permeability of nervous tissue in theophyllinised animals to sodium ferrocyanide, A., 528.
- Giordano, I., toxicity of illuminating gas and problem of rendering it innocuous, B., 53.
- Giorgio, C., determination of reducing sugars, A., 68.
- Giragossintz, G., and Olmsted, J. M. D., portal and hepatic blood-sugar after glucose administration, A., 1392.
- Giral, F., derivatives of 2-methylnaphthalene, A., 615.
- Analysis of Spanish digitalin, B., 380.
- See also Hauser, I., and Kuhn, R.
- Girard, A., and Chaudron, G., dehydration of natural and of artificial lepidocrocite, A., 469.
- Constitution of rust, B., 311.
- See also Michel, A.
- Girard, André. See Laboratories Franç. Chimiothérapie.
- Girard, P., and Abadie, P., detection of molecular interactions by the time of relaxation of polar molecules, A., 684.
- Lourau, M., and Pitres, E., behaviour of alexin in an electric field, A., 1002.
- Girard, R. See Dufraisse, C.
- Girardet, L. F., foundry sands, B., 358.
- Girault, F., determination of lactic acid, A., 327.
- and Girault, J., determination of local anaesthetics derived from amino-alcohols, B., 286.
- Girault, J. See Girault, F.
- Girdler Corporation, recovery of sulphur from hydrogen sulphide, (P.), B., 148.
- See also Bottoms, R. R.
- Gire, G., action of magnesium on solutions of nickel sulphate and cobalt sulphate, A., 52.
- Formation of basic sulphate and precipitation of nickel from solution by magnesium, A., 716.
- and Puche, F., thermal decomposition of rhodichlorides, A., 447.
- Giri, K. V., amylase of batate (*Ipomoea batatas*), A., 249.
- Characterisation of different amylases, A., 532.
- Salt activation. II. Influence of salts on the stability of amylase, A., 1535.
- and Shrikhande, J. G., salt activation. I. Influence of neutral salts on the enzymic hydrolysis of starch, A., 1162.
- Girko, P. A., and Jakovenko, M. J., influence of mineral fertilisers on crop and accumulation of nicotine in various species of *Nicotiana rustica*, B., 1158.
- Giroud, A., Chnc, R., Ratsimamanga, R., and Leblond, C. P., fixation and elimination of ascorbic acid, A., 1546.
- and Leblond, C. P., variation of the vitamin-C content of the tissue, A., 670.
- Leblond, C. P., and Ratsimamanga, R., significance of reduction of silver salts at surface of chloroplasts, A., 131.
- Parallelism between vitamin-C and chlorophyll, A., 131.
- Vitamin-C in the skin, A., 546.
- Vitamin-C and the carotenoids; maturation of fruits, A., 670.
- Parallelism between ascorbic acid and chlorophyll, A., 670.
- Ascorbic acid in the pituitary gland, A., 793.

- Giroud, A., Leblond, C. P., Ratsimamanga, R., and Rabinowicz, M., normal content of ascorbic acid in the organism, A., 1546.
See also Rando, L.
- Giršavičius, J. O., Efendi, P. H., and Ryzhova, A. P., antiglyoxalase, A., 122.
- and Heyfetz, P. A., determination of lactic acid in presence of methylglyoxal, A., 102. Kinetic investigation of reaction between glutathione and methylglyoxal, A., 476. Mechanism of glyoxalase activation by glutathione, A., 1536.
- and Ryzhova, A. P., antiglyoxalase action of histidine, A., 1026.
See also Efendi, P. G.
- Giršewald, G. von, Weidmann, H., Roesner, G., and Amer. Lurgi Corp., acid disodium pyrophosphate, (P.), B., 672.
- Girvin, C. W., and Gen. Salt Co., recovery of iodine [from brine], (P.), B., 187.
- Gisiger, L., movement of phosphoric acid of fertilisers in meadow soils, B., 372. Determination of the potassium requirement of soils, with special reference to Dirks' method, B., 865.
- Gisolf, J. H., and Zeeman, P., intensity measurements with a reflexion echelon, A., 676.
- Gisvold, O., phytochemistry. CXI. Sterols from *Monarda fistulosa*, A., 797. Sterol from *Pinus sabiniana*, A., 797.
See also Hall, J. A.
- Gittel, W. See Hiltner, W.
- Gittings, L. D., and Swann Research, Inc., oleoresinous coating compositions, (P.), B., 775.
- Gitzen, W. H. See Aluminum Co. of America.
- Giuliani, G., auropyrrole black, A., 355.
- Giuliano, R., bonemcal as a mineral supplement for cattle, B., 699.
- Givaudan-Delawanna, Inc. See Carpenter, M. S.
- Givens, J. W., Almquist, H. J., and Stokstad, E. L. R., transmission of light through eggshell, B., 921.
See also Almquist, H. J.
- Giza, T., casein, A., 638.
- Gizinski, J. See Bojanowski, J.
- Glabau, C. A., and Kepes, E., study of physical and chemical properties of dried egg-albumin with the view of standardising for the official cake-baking test, B., 652.
- Gladnikoff, H. See Falconer, B.
- Gladstone, S. A., and Dack, S., respiratory exchange of oxygen and carbon dioxide during re-breathing from a rubber bag, A., 1391.
- Glanville, W. H., adjustment of water content of concretes or mixtures of granular materials, (P.), B., 754.
- Glanzstoff-Courtaulds Ges.m.b.H., artificial silk, (P.), B., 266, 448. Manufacture of artificial silk, etc. [of reduced lustre], (P.), B., 1138.
- Glas, E., electrochemical recording, (P.), B., 67.
- Glasebrook, A. L. See Rice, F. O.
- Glaser, A. C., Johnstone, P. N., and Orr, T. G., blood-amylase in experimental pancreatitis, A., 517.
- Glaser, W., ideal gases, A., 679.
- Glasgow, A. G., tactical use of carburetted water-gas as a coal-gas auxiliary, B., 708.
- Glasgow, H., feeding habits of the sinuate pear borer in relation to control practices, B., 247. Substitutes for lead arsenate in cherry fruit-fly control, B., 743.
- Glass, S. W. See Chaney, N. K.
- Glassford, J., definitions and standards for flavouring extracts, B., 251.
- Glasstone, S., electrode potentials and the form of electro-deposited metals, B., 997.
- and Hickling, A., electrolytic oxidation. V. Formation of hydrogen peroxide by electrolysis with a glow-discharge anode. VI. Anodic oxidation of acetates: mechanism of the Kolbe and Hofer-Moest reaction in aqueous solution, A., 46, 176.
- Glaswerk G. Fischer, luminescent glass, (P.), B., 149.
- Glathe, H., rotting of stall manure with special reference to anaerobic flora, B., 471.
- Glatfield, J. W. E., and Hoen, R. E., trihydroxybutyric acids, A., 1223.
- and Macmillan, D., preparation of aldonic and saccharic acid amides in liquid ammonia, A., 72.
- Glatthaar, C., and Reichstein, T., *d*-adonose (*d*-erythro-2-ketopentose), A., 329.
See also Reichstein, T.
- Glatzel, H., alkali losses after administration of sodium and potassium, A., 115.
- and Schmitt, F., acid-base equilibrium in blood following administration of sodium chloride, A., 524.
- Glauner, R., relation between rate of solution, solvent, and lattice forces in single copper crystals, A., 309.
- Glaxman, M. T., corrosion of metals, B., 501.
- Glazman, J. M. See Kulski, L. A.
- Glazunov, A., space lattices of berthollides, A., 571. Testing characteristics of metallic [zinc] coatings, B., 28. Testing of metal coatings, B., 192. Determination of the phase structure of metallic protective coatings by anodic solution, B., 997.
- Teindl, J., and Halik, J., influence of small amounts of agar-agar and gelatin on the *KG* [crystallisation velocity] of cathode deposits of silver, A., 1084.
- Glazunov, M. F., and Povolotzkaja, K. L., experimental scurvy in relation to character of basal diet, A., 386, 547.
See also Bukin, V. N.
- Glazunova, Z. See Milovidova, A.
- Gleason, A. R. See Standard Oil Co. of California.
- Gleason, G. H., Loonam, A. C., and Guggenheim Bros., treating sewage, (P.), B., 176.
- Gleason, G. W. See Paul, W. H.
- Gleason, P. R., electrical characteristics of barrier-layer photo-cells, A., 188.
- Gleave, J. L., Hughes, E. D., and Ingold, C. K., mechanism of substitution at a saturated carbon atom. III. Kinetics of degradations of sulphonium compounds, A., 452.
See also Angus, W. R.
- Gledhill, W. E., coating of tennis-racket strings, (P.), B., 143.
- Gleditsch, E., and Föyn, E., period of radium, A., 558.
- Gleeson, P. J., operating a Mills-Packard [sulphuric acid] plant under tropical conditions, B., 801.
- Gleichmann, H., compressed-air roasters for spathic iron ore, B., 1144.
- Glenfield & Kennedy, Ltd. See Peebles, J.
- Gleu, K., and Hubold, R., action of hydrogen peroxide on nitrous acid; per-nitrous acid. II, A., 1213.
- and Petsch, W., chemiluminescence of dimethyldiacridylum salts, A., 281.
- Gley, P., masculinising action of urine, A., 791.
- Glichitch, L. S., and Naves, Y. R., Bulgarian rose oil and its rhodinol content, B., 45.
- Glick, D., technique of the Kuttner-Lichtenstein method for determination of organic phosphorus, A., 369. Micro-determination of vitamin-C, A., 793. Enzymic histochemistry. XII. Esterase in gastric and duodenal mucosa of pigs, A., 1025. Methods and applications of enzyme studies in histological chemistry of the Linderström-Lang-Holter technique, A., 1161.
- and Biskind, G. R., histochemistry of adrenal gland. I. Distribution of vitamin-C. II. Quantitative distribution of lipolytic enzymes, A., 1036, 1263. Histochemistry of the pituitary gland; quantitative distribution of vitamin-C, A., 1264.
- Glick, D. M., low-grade massecuites, B., 518.
- Glick, D. P., effects of microbiological activity during the ageing of moist ceramic materials, B., 496.
- Glick, G. B., ash balances [in sugar analysis], B., 474.
- Glickman, I. See Whittaker, R. M.
- Glidden, K. E., measurement of inter-facial tension at a mercury-mercurous sulphate solution interface by drop-weight method, A., 442.
- Glidden Co., Wahlforss, E., Johnson, C. L., and Lacy, G., lubricants, (P.), B., 794.
See also Cone, C. N., and Moore, C. G.
- Gliemerth, G., Göttingen method for determining wheat quality, B., 1113.
- Glikman, L. A., and Gontscharov, S. P., shape of sample for testing toughness of metals by the dynamic test, B., 63. Testing of steels for embrittlement after prolonged heating and strain, B., 63.
- and Tschistovitsch, P., determination of coefficient of linear expansion using the Schevenar dilatometer, B., 272.
- Glikman, S. A., structure of cellulose nitrate solutions, A., 1319.
- Glikman, T. S., influence of the solvent on velocity of decomposition of hydrogen peroxide by means of platinum. II, A., 941.
See also Pisarshevsky, L. F.
- Gliksmann, W. See Lieberman, H.
- Glinn, R. J., care of modern steam-generating plant from the water side, B., 257.
- Gliselli, S., and Boratynski, K., meta- and pyro-phosphates as sources of phosphorus for plants, B., 966.
- and Przyszczykowski, A., solubility of antimonic acid in water, A., 292.
- Glog, V. F., modern developments in coal cleaning, B., 211.
- Glovov, V. A. See Volshinski, I. A.
- Glocker, R., Pfister, H., and Wiest, P., X-ray examination of α -iron magnet alloys, A., 1066.
See also Broili, H.

- Glockler, G., complex formation due to polarisation; definition of a molecule, A., 35.
and Davis, H. M., Raman effect of acetylenes. I. Methyl-, dimethyl-, and vinyl-acetylene, A., 146.
- Gloor, W. B., properties of low-viscosity nitrocelluloses of varied nitrogen content, B., 1135.
- Gloster, A. J. See Work, L. T.
- Glówczyński, Z. See Rogoziński, F.
- Glückauf, E. See Paneth, F. A.
- Glukhovskii, I. E. See Khelemski, M. Z.
- Gluschkova, V. P. See Rutovski, B. N.
- Glynn, H. E. See Bacharach, A. L.
- Glynn, M. D., incidence of "take-all" on wheat and barley on experimental plots at Woburn, B., 821.
- Gmach, E. See Wasicky, R.
- Gmelin-Schedrina, action of thyroxine on the fowl embryo, A., 668.
- Gnadinger, C. B., Corl, C. S., and Clark, C. A., effect of antioxidants on highly concentrated pyrethrum extracts, B., 1117.
- Gnann, W., insulating powers of amber, quartz glass, and sulphur in dry and moist air, A., 683.
- Gneist, K., ensilage trials with grass from irrigated meadows, B., 118. Comparison of sealed and soil-covered silos, B., 521.
- Gnessin, J. D., apparatus for detection and determination of arsenic by the Gutzeit and Beck-Merres methods, A., 53.
and Dorosinski, L. S., preparation of stable lithium iodide, A., 832. Preparation of tellurium from the Cottrell dust of the Odessa Superphosphate Factory, B., 723.
- Go, Y. See Meyer, K. H.
- Goaddy, H. K., and Staey, R. S., action of parathormone, A., 258.
See also Cope, C. L.
- Gobert, manufacture of acetylene by the electric arc in liquid hydrocarbons, B., 1052.
- Goble, A. T., four-vector problem and its application to energies and intensities in platinum-like spectra, A., 1298.
- Gockel, H., Raman effect. XLII. Raman spectra of naphthalene and its mono-derivatives, A., 914. Preparation of guanidine nitrate from ammonium thiocyanate, A., 1111.
- Godal, A., and Övsthus, A., treatment of herring and other fish of the *Clupeidae* family for manufacture of oil and food-stuffs poor in fat and having good keeping properties, (P.), B., 319.
- Godbole, N. N., and Sadgopal, application of the thioeyanogen value to determination by Kaufmann's method of oleic and linoleic acid contents of Indian oils and fats which contain no linolenic acid. II., B., 68. Comparative utility of milks and ghees of the Indian cow and buffalo as human-food materials, B., 1115.
See also Varma, P. S.
- Godehot, M., cyclane series, A., 73.
and Cauquil, (Mlle.) G., action of organo-magnesium compounds on ethyl 1-aminocyclohexane-1-carboxylate, A., 858.
and Mousseron, M., derivatives of 2-methylcyclopentan-one and -ol, A., 982.
- Mousseron, M., and Granger, R., dehalogenation of cyclic chlorohydrins with curtailment of the ring, A., 616.
- Godehot, M., Mousseron, M., and Richaud, R., resolution of cyclanediols, A., 209. 1-Methyl-2²- and -2³-cyclopentenes and their derivatives, A., 851.
- Goddard, C. L. B., Risdon sulphuric acid plant of the Electrolytic Zinc Co. of Australasia, Ltd., B., 450.
- Goddard, D. R., metabolism of *Tricophyton interdigitale*, Priestley, A., 405. Reversible heat-activation inducing germination and increased respiration in the ascospores of *Neurospora tetrasperma*, A., 1540.
and Schubert, M. P., action of iodoethyl alcohol on thiol compounds and proteins, A., 737.
- Goddard, E. N., influence of tertiary intrusive structural features on mineral deposits at Jamestown, Colorado, A., 1101.
- Godén, W., and Duckworth, J., variations in serum-magnesium and in partition of serum-calcium in normal parturition and in milk-fever, A., 385.
- Godénir, A. See Maisin, J.
- Godfrey, G. H., confinement of chloropierin and other gases for fumigation purposes, B., 335.
Oliveira, J., and Hoshino, H. M., increased efficiency of chloropierin for nematode control with better confinement of gas, B., 375.
- Godfried, E. G., clinical tests for bilirubin in urine, A., 235. Determination of bilirubin in blood by the diazo-method, A., 999. Protein-free urines giving a biuret-like reaction, A., 1007.
- Godlewicz, M., and Laidler, K., comparison of extraction processes as applied to distillation residues from crude oil of Grabownica, B., 483.
and Pilat, S. von, gas solutions as a new type of selective solvent for petroleum products, B., 131.
- Godlin, M. M., determination of adsorptive capacity of soils, B., 965.
- Godnev, J., molecular heat capacity equation of sulphur vapour S₂, A., 1312.
and Chudjakov, A. S., chemical constant of S₂, A., 574.
and Sverdlin, A., heat capacity, entropy, and free energy of sulphur vapour S₂ between 100° and 5000° abs., A., 1454.
- Godnev, T. N., mechanism of the reaction between magnesiumpyrrole and ethyl phthalate, A., 627.
- Godowsky, L., jun. See Kodak, Ltd., and Mannes, L. D.
- Goebel, E., influence of p_H on manufacture of glue from hides, B., 564.
See also Neumann, B.
- Goebel, F., histamine and blood-cholesterol, A., 116.
- Goebel, H. See Schoeller, W.
- Goebel, W. F., chemo-immunological studies on the soluble specific substance of *Pneumococcus*. II. Chemical basis for immunological relationship between capsular polysaccharides of types III and VIII *Pneumococcus*, A., 1168.
and Babers, F. H., derivatives of glycuronic acid. V. Synthesis of glycuronides. VI. Preparation of methyl α -chloro- and α -bromo-triacetylglycuronate; synthesis of β -glycuronides, A., 1352, 1483.
- Goedecke, H., time formation of dielectric constant of Rochelle salt in an electric field, A., 809.
- Goedecke & Co., Chemische Fabrik A.-G., difficultly dissociable acyl derivatives of salicylic acid and its esters, (P.), B., 839.
- Goettler, L., photographic printing fabric, (P.), B., 334.
- Göler, F. K. von, and Sachs, G., bearing metals, B., 729.
- Gömöri, G., micro-detection of insoluble calcium salts in tissues, A., 270.
- Gömöri, P., and Csomay, J., effect of extracts of posterior pituitary on liver-glycogen, A., 902.
See also Orzechowski, G.
- Gömöry, S., cause of inferior quality of insect-damaged wheat, B., 425, 1013. Changes in the quality of wheat flour during storage, B., 1114.
- Göpfert, H., ultra-violet absorption spectra of some organic compounds (acetylene, anthracene, phenanthrene), A., 913.
- Goeppert-Mayer, M., double β -disintegrations, A., 1440.
- Görg, H. See Schramek, W.
- Görlacher, H. F., apparatus for demonstration of explosive gases or vapours in air above and below the explosive limits, B., 926.
- Görlich, B. See Bernhauser, K.
- Görlich, H., [dyeing] real silk with naphthol AS dyes, B., 669.
- Görlich, P., working of counter tubes and gas-filled photo-cells, A., 282.
See also Fleischer, R.
- Görriksen, J., removal of sulphur from iron and steel melts, B., 853.
- Goertemiller, K. H. See Hall, E.
- Görtz, S., colorimetric micro-determination of cholesterol, A., 270.
- Gössl, V., colorimetric methods for determining soil reaction in agriculture or forestry, B., 646.
- Gössler, F. See Füchtbauer, C.
- Goessmann, C. I., papermaking, (P.), B., 1139.
- Goethals, C. A., electric moments of pyridine derivatives, A., 568.
- Göthel, E., study of textile fibres with the Reichert fluorescence microscope, B., 623.
- Goettsch, E. See Weech, A. A.
- Goetz, A., group phenomena in metal crystals, A., 151. Cryogenic laboratory of the California Institute of Technology. I., A., 1212. Production of "colloidal single crystals," A., 1449.
- Buehta, J. W., and Ho, T. L., recording dilatometer of high sensitivity, A., 189.
and Jacobs, R. B., effect of temperature on reflexion of X-rays from bismuth crystals, A., 16.
See also Anderson, A. B. C., Buchta, J. W., Ho, T. L., and Wolf, A.
- Goetz, C., extraction of metals from [sulphide or arsenide] ores, (P.), B., 156.
- Götz, F. W. P., atmospheric bands in the ultra-violet, A., 424.
See also Tönsberg, E.
- Goeze, G. See Gassner, G.
- Gözy, B., significance of fumaric acid in respiration of animal tissues. V. Micro-determination of succinic acid and its application, A., 1406.
See also Annan, E.
- Goff, I. N., determination of open-hearth slag composition, B., 1046.
- Goffart, H., biology and control of potato nematode (*Heterodera schachtii*, Schmidt), B., 118.

- Goffart, H., and Brull, L., urinary calcium debit and polyuria from ingestion of water, A., 774.
- Goffin, R. See La Barre, J.
- Goffinet, R., determination of free cholesterol by digitonin, A., 771. Determination of total cholesterol with digitonin, A., 1044.
- See also Reding, R.
- Gogate, D. V., and Kothari, D. S., measurement of quantity of light by the photoelectric cell, A., 1217.
- Gogate, G. R. See Limaye, D. B.
- Gogoberidze, D. B., and Ananiaschvili, E. G., mechanical twinning structure in calc spar, A., 1311.
- Gogte, G. R., β -arylglutaconic acids. II. Condensations with phenolic ethers, A., 1366.
- Gohda, T., artificial wool from seaweed, (P.), B., 143. Artificial film from seaweed, etc., (P.), B., 185.
- Gohr, E. J. See Standard-I. G. Co.
- Goffion, R., colorimetric determination of tyrosine index of urinary polypeptides, A., 379.
- and Spacy, J., determination of tyrosine index of serum-polypeptides, A., 374.
- See also Simon, T.
- Gokhale, G. N. See Dixit, V. M.
- Golber, L. M., bile in thyroid diseases; bile-stone formation, A., 384.
- Goldberg, J. M., biological action of metals irradiated by means of a mercury-quartz lamp. I. II. Effect of irradiated iron on the growing organism, A., 896, 1154.
- Goldberg, M. B. See Mazel, V. A.
- Goldberg, M. W. See Ruzicka, L.
- Goldblatt, M. W., constituents of human seminal plasma, A., 1006. Properties of human seminal plasma, A., 1309.
- Goldbraich, Z. E. See Alexeevski, E. V.
- Golden, L. A. See Handelsman, M. B.
- Goldenberg, A., application of synthetic tanning materials for preparing hard and soft leather goods, B., 70.
- Goldenberg, J. D., determination of sulphur dioxide in air, B., 335.
- Goldenberg, M., Gottdenker, F., and Rothberger, C. J., methylglyoxal and other fission products of anaerobic carbohydrate metabolism, A., 778.
- Goldet, A., thermal variation of magnetic birefringence and molecular electric moments, A., 568.
- Goldfarb, A. R. See Sobel, A. E.
- Goldfarb, W. See Himwich, H. E.
- Goldfeder, A. See Partridge, H. M.
- Goldfinger, P., and Jeunehomme, W., hydration of the D' ion in heavy water and dissociation of deuterio-acids, A., 824.
- and Lasarev, V., dissociation energy of the carbon monoxide molecule and sublimation heat of carbon, A., 925.
- Interaction of amines with heavy water, A., 965.
- Lasarev, V., and Letort, M., thermochemical consideration of the carbonyl group, A., 811.
- and Scheepers, L., systematic calculation and technique of the preparation of heavy water, A., 311.
- Goldforb, A. J., increased permeability to water of ageing unfertilised eggs (*Arbacia punctulata*), A., 1521.
- Goldhaber, M., probability of artificial nuclear transformations and its connexion with the vector model of the nucleus, A., 276.
- See also Chadwick, J., and Taylor, H. J.
- Goldhamer, S. M. See Sturgis, C. C.
- Goldheim, S. See Andrews, D. H.
- Goldich, S. S. See Tolman, C.
- Goldie, H., precipitation of ferric oxide hydrosol in solutions of moranyl, A., 164.
- Influence of compounds of the moranyl series on structure of colloids, A., 408.
- Influence of compounds of the moranyl series on diphtheria toxin, A., 408.
- Recovery of diphtheria antitoxin coagulated by the toxin by means of sodium salts of aminonaphthalenetrisulphonic acid, A., 536.
- Stabilisation and recovery of diphtheria antitoxin flocculated by the toxin, A., 787.
- Effect of isomeric sodium aminonaphthalenetrisulphonates on structure of diphtheria toxin and antitoxin, A., 1020.
- Purification and concentration of diphtheria toxin and anatoxin with sodium β -naphthylamine-3:6:8-trisulphonate, A., 1028.
- Influence of compounds of the moranyl series on blood-coagulation, A., 1263.
- Characteristic chemical reaction of formalised toxic filtrates, A., 1519.
- Goldin, G., determination of benzonitrile in coal-tar oils, B., 790.
- Goldina, R. B., determination of oxygen in boiler feed-water de-aerated by the sulphite method, B., 529.
- Golding, E. See Lightfoot, B.
- Golding, J., and Brit. Drug Houses, Ltd., testing of fluids [e.g., milk from the cow], (P.), B., 700.
- Mackintosh, J., and Mattick, E. C. V., milk of a typical herd of shorthorn cows. II, B., 872.
- See also Dann, W. J.
- Golding, N. S., p_H of creamery waters and their relationship to washing butter, B., 874.
- Neutralisation of cream for butter making, B., 1161.
- See also Okulitch, G.
- Goldman, H. J., graphical demonstration of the Procter-Wilson equations for swelling of gelatin in hydrochloric acid, B., 819.
- Goldman, I., purification of acetic acid in the Asha plant, B., 1036.
- and Vul, B., ageing of electrical insulating materials, B., 363.
- See also Vul, B.
- Goldman, J. See Wells, M. T.
- Goldman, J. H. See Wells, M. T.
- Goldman, M. A., and Commercial Filters Corp., filter elements, (P.), B., 84.
- Goldman, S. See Lilienfeld, J. E.
- Goldmann, H., and Buschke, W., ascorbic acid (vitamin-C) and the blood-aqueous humour barrier, A., 1546.
- Goldmann, L. N. See Solotareva, N. P.
- Goldovsky, (Mile.) N. See Prot, M.
- Golding, W., Razinsky, L., Greenblatt, M., and Cohen, S., influence of protein intake on urea clearance in normal man, A., 524.
- Goldschmidt, S., and Gräffinger, G., stereoisomeric 4-methylcyclohexane-1-carboxylic-1-acetic acids, A., 489.
- Goldschmidt, V. M., [Laue diagrams and morphology], A., 284.
- Rare elements in coal ashes, B., 978.
- Goldschmidt Akt.-Ges., T., decomposition of siliceous aluminiferous minerals, (P.), B., 227.
- Introduction of steel-forming additions into aluminogenetic iron in aluminothermic welding, (P.), B., 313.
- Goldshtein, V. A., utilising rejected leather for shoes, B., 863.
- and Tzukerman, B. I., preparing velour from rejected pig skins, B., 420.
- Goldstein, B., cathepsin of tissues, A., 1537.
- and Guinzburg, M., proteinases (cathepsin) in tissues of the infantile organism with dysentery and toxic dyspepsia, A., 1527.
- and Karkova, K. I., influence of different diets on enzymes of the organism. IV. Fasting and enzymes of tissues, A., 1536.
- and Milgram, E. J., tissue proteinases in organs of animals in different stages of phylogenetic evolution, A., 1537.
- Cathepsin in the embryo and in maternal tissues. I, A., 1537.
- Sigalova, R. R., and Melnischenko, V. D., influence of different diets on enzymes of the organism. V. Protein-free food and enzymes of blood and tissues, A., 1536.
- Goldstein, H., and Chastellain, F., action of acetic anhydride on β -naphthamidrazone, A., 81.
- Mohr, R., and Blezinger, T., synthesis of 4-iodo- α -naphthoic acid, A., 1122.
- and Studer, A., derivatives of β -naphthoylhydrazine, A., 77.
- Goldstein, H. I., Italian work on liver therapy, A., 236.
- Goldstein, L., electromagnetic fields in the quantum theory. I. and II, A., 8, 279.
- Determination of potential of interaction of corpuscles, A., 278.
- Physical magnitudes in Dirac's theory, A., 560.
- Non-adiabatic character of variations of nuclear charge, A., 804.
- See also Hoard, J. L.
- Goldstein, R. F. See Imperial Chem. Industries.
- Goldsworthy, M. C., fungicides, (P.), B., 518, 692.
- and Green, E. L., availability of copper in Bordeaux mixture residues and its absorption by conidia of *Sclerotinia fructicola*, B., 568.
- See also Roberts, J. W.
- Goldsztaub, S., derivatives of ferric oxide ($\text{FeO} \cdot \text{OH}$, FeO_2Na , FeOCl): determination of their structures, A., 918.
- Golendeev, V. P., application of citric acid to determination of nickel in presence of salts of iron and of phosphoric acid, A., 1339.
- See also Plisov, A. K.
- Goljachovski, N. V., influence of reaction of the medium on action of poisons, A., 654.
- Goll, G., use of glue in rubber mixings, B., 113.
- Gollan, J., nomogram for correction of results of mechanical analysis of soils, B., 1059.
- Gollmar, H. A. See Koppers Co. of Delaware.
- Gollnow, H. See Schüler, Herman.
- Golossova, O. N. See Kuhlmann, A. G.
- Goloub, S. I., excitation spectra of luminescence of solid solutions of rhodulic, A., 1190.
- Golova, O. P., and Katz, A. M., improving quality in production of [sulphite] pulp, B., 446.
- Influence of conditions of sulphuric acid hydrolysis on yield and chemical composition of lignin from bleached sulphite-cellulose, B., 718.
- Golovastikov, I., two-bath method for chrome-tanning, B., 817.
- Golovati, R. N., and Levin, J. I., causes of rapid deterioration of coke-oven brickwork, B., 993.
- and Sidorov, rapid determination of aluminium in iron ores, B., 63.

- Golovka, N. A. See Brodovitsch, K. I.
 Golovkov, M. P. See Palkin, A. P.
 Golub, G. L., and Slutskii, A. B., [coke] ovens with two collecting mains, B., 1123.
 Golub, V. P., and Vedjernikova, E. I., phenol content of the tar from Saviclovsk (Saratov) shales, B., 790.
 Golubev, N. A. See Karnitzki, V. A.
 Gombás, P., lithium bromide crystal and polarisation effects, A., 284. Approximate analytical calculation of exchange energies for Thomas-Fermi atomic systems, A., 432. Metallic bonding, A., 815. Alkali metals, A., 1187.
 and Neugebauer, T., constants of the HCl molecule, A., 150.
 Gombault, U., and Soc. Industr. de la Cellulose (S.I.D.A.C.), adhesive tape, (P.), B., 799.
 Gombert, M., and Gordon, W. E., halo-chromic salts from triarylmethylthiol-acetic acids, A., 486.
 Gomm, A. S., and Hill, D. W., reactions of *o*-hydroxybenzylidenediacetophenones. V. Functional group reactions of salicylidenediacetophenone, A., 1377.
 Goncharov, A. Y., influence of composition of light-sensitive paper on quality of printing, B., 79.
 Gonell, H. W., disperse systems from the technical viewpoint, B., 177.
 Goniev, G. S. See Lapin, N. P.
 Gonnerman, H. F., cement composition in relation to strength and resistance of mortar, B., 455. Study of cement composition in relation to strength, length changes, resistance to sulphate waters and to freezing and thawing of mortars and concrete, B., 1044.
 Gonschewski, H., pretreating smooth cast pieces, in particular, centrifugally-cast tubes manufactured in chilled moulds, for coatings of paint and other coatings, (P.), B., 680.
 Gonser, B. W., and Wert, L. R. van, age-hardening characteristics of copper-nickel-silicon alloys, B., 152.
 Gontscharov, I. D. See Frumkin, L. S.
 Gontscharov, S. P. See Glikman, L. A.
 Gonyak, N. L. See Dorokhov, P. K.
 Gonyer, F. A. See Moehman, R. S.
 Gonzaga, A. C., sugar and calcium partition in blood of normal and diseased animals, A., 385.
 Gonze, M., mechanism of oxidation of hydrazo-compounds by iodine, A., 41. Preparation of 3,3'-ditrifluoromethyl-hydrazobenzene, A., 77.
 Gooch, S. D. See Kerschbaum, F. P.
 Good, R. C. See Electro Metallurg. Co.
 Goodacre, R., effect of heavy oils and greases on fatigue strength of steel wire, B., 550.
 See also Gill, E. T.
 Goodavage, J. E., [behaviour of] stainless steel in the textile industry, B., 625.
 Goode, E. A., and Heath, T. V., use of the Redwood No. I viscosimeter for determination of viscosity in absolute units, B., 177.
 Goode, F. H. See Moss Gear Co.
 Goodemoot, K. See Huston, R. C.
 Gooderham, W. J., analysis of benzols, B., 885.
 Goodeve, C. F., Eastman, A. S., and Dooley, A., reaction between sulphur trioxide and water vapours and a new periodic phenomenon, A., 40.
 See also Hoather, R. C., and White, C. F.
 Goodhue, L. D., and Hixon, R. M., electron-sharing ability of organic radicals. IX. Dissociation constants of amines and acids in ethyl alcohol, A., 1321.
 Gooding, C. M. See Anderson, L. C.
 Gooding, E. J., and Murgatroyd, J. B., selenium decolorising [of soda-lime-silica glass], B., 496.
 Gooding, W. L. See Kobe, K. A.
 Goodings, A. C., effect of temperature on moisture regain of wool, B., 445.
 Goodman, A. J., petroleum geology of Western Canada, A., 724.
 Goodman, H. F. See Seligman, R.
 Goodman, L. R., effect of urine from pregnant women on ovary-stimulating potency of pituitaries of rabbits and rats, A., 1425.
 Goodrich, W. E., penetration of molten white metals into stressed steels, B., 1047.
 Goodrich Co., B. F., rubber compositions and preservation of rubber, (P.), B., 776.
 and Semon, W. L., prevention of deterioration of rubber or rubber compositions, (P.), B., 370.
 See also Campbell, A. W., Geer, W. C., Gray, H., Jones, Webster N., Karrer, E., Newton, E. B., Semon, W. L., Sloan, A. W., and Trumbull, H. L.
 Goodsit, E. See Marshall, E. A.
 Goodson, J. A., modified *Cinchona* alkaloids. III. Chlorodihydro-bases, A., 1256.
 Goodway, N. F. See Barnett, E. de B.
 Goodwin, C. J. See Squire, L. R. L.
 Goodwin, T. H. See Cox, E. G.
 Goodwin, T. W., and Higgins, G. M., diurnal changes in liver during pregnancy, A., 108.
 Goodwin, W., [report of] Department of Advisory Chemistry, B., 1011.
 Martin, Hubert, Salmon, E. S., and Ware, W. M., control of apple scab: Allington pippin and Newton Wonder, 1933, B., 246.
 Pizer, N. H., Salmon, E. S., and Ware, W. M., control of apple scab: Allington pippin and Newton Wonder, B., 869.
 Goodyear Tire & Rubber Co., [accelerators and retarders for] vulcanisation of rubber, (P.), B., 35. Antioxidants [for rubber], (P.), B., 35, 280. Vulcanisation of rubber, (P.), B., 241. Unsymmetrically-substituted alkylenediamines, (P.), B., 348. Liquid coating compositions, (P.), B., 511.
 Goormaghtigh, G. See Soc. Anon. "Produits Chim. & Engrais L. Bernard."
 Goormaghtigh, N., and Handovsky, H., thyrotropic action of vitamin-D, A., 793.
 Gootz, R., and Tunger, H., determination of nitrate-nitrite-nitrogen in urine, A., 774.
 Goovaerts, R. See Delfosse, J. M.
 Gopstein, N. See Roginski, S.
 Goranflo, S., and Wilson & Co., distillation and purification of [higher] fatty acids, (P.), B., 68.
 See also Tolman, L. M.
 Goranson, R. W., and Kracek, F. C., effect of pressure on phase equilibria of sodium tungstate and related thermodynamic properties, A., 447, 1322.
 Gorbach, G., and Kadner, R., gravimetric determination of fat and cholesterol in blood, A., 1518.
 and Ruess, H., action of ultra-violet light on yeast-invertase. VI. The activating zone, A., 1538.
 Gorbatschev, S. V., vapour pressure of anabasine and nicotine, A., 22. Complex compounds of silver halides with halides and silver salts, A., 695.
 and Mustel, E. R., lower stability limit of drops in collision, A., 1320.
 and Nikiforova, V. M., upper stability limit of drops in collision, A., 1319.
 Gorbatscheva, I. N. See Atabekova, M. A.
 Gorbavizki, I. E. See Magidson, O. J.
 Gorbunova, K. M., and Vagramjan, A. T., cathodic passivity, A., 451.
 Gorchakov, G., and Lavrov, F., influence of the electric discharge on the region of spontaneous ignition in the mixture $2H_2-O_2$, A., 590.
 Gordadse, G. S., three-centre problem. I., A., 1298.
 Gordon, A. R., calculation of free energy of polyatomic molecules from spectroscopic data. II., A., 811. Free energy of sulphur dioxide, A., 1204.
 Gordon, A. S. See Ponder, E.
 Gordon, B., jun., and Skenandoo Rayon Corp., artificial silk, (P.), B., 720.
 Gordon, C. J., [tightening-up device for] electric [primary] batteries [of the pile type], (P.), B., 558.
 Gordon, H. D., and Gordon, W. W., carbonisation of wool, (P.), B., 1137.
 Gordon, K. See Applebey, M. P., and Imperial Chem. Industries.
 Gordon, L. V. See Nasakin, S. P.
 Gordon, N. E. See Murray, J. W.
 Gordon, P. S. See Freundlich, H.
 Gordon, W. E. See Gombert, M.
 Gordon, W. G., and Jackson, R. W., metabolism of monomethyltryptophans, A., 1015.
 See also White, Abraham.
 Gordon, W. W. See Gordon, H. D.
 Gordonoff, T., and Ludwig, T., influence of vitamins on growth of normal and tumour tissue, A., 1174.
 Gore, H. C., Frey, C. N., and Standard Brands, Inc., treatment of food materials, (P.), B., 123.
 and Steele, H. K., determination of saccharifying power of malt-diatase, B., 1065.
 Gore, V., photosynthesis of formaldehyde in tropical sunlight, A., 713.
 Gorelik, K. S. See Lurie, S. N.
 Gorenbein, E. J. See Plotnikov, V. A.
 Gorev, V., increasing productivity of coke ovens, B., 1123.
 Gorham, R. P., control of carrot rust fly, *Psila rosae*, Fab., B., 1012.
 Gori, P., flocculation of animal sera by action of orthophosphoric acid solutions, A., 644.
 Goria, C. See Losana, L.
 Gorin, M. H., "salting-in" of hydrogen peroxide by electrolytes, A., 1457.
 Gorini, C., rational pasteurisation of milk, B., 77, 873.
 Goris, A., and Canal, H., heteroside of *Primula acaulis*, Jacq., A., 268. Presence of 2-hydroxy-5-methoxyacetophenone in extracts of rhizomes of *Primula acaulis*, A., 1041.
 Gorn, A., and Jakuba, E., rapid determination of hydrogen sulphide and sulphur dioxide in generator gas, B., 6.
 Gornostapolski, S. E. See Kharaz, S. S.
 Gorochohinskaja, M. S. See Miris, D. I.
 Gorochovski, G. N., electrokinetic potential of silver iodide, A., 823.
 and Protas, I. R., stability of silver iodide sols, A., 1319.

- Gorodetskaja, A. See Frumkin, A.
- Gorodisski, H., chemical topography of the brain; chemical composition of brains of normal and fasting cats, A., 1520. Creatinephosphoric acid in brains of various animals, A., 1520.
- and Epelbaum, S., influence of various carbohydrates on formation of lactic acid and lactacidogen in aqueous brain extract, A., 1531. Lactic acid and lactacidogen during short autolysis of aqueous extracts of cat's brain, A., 1531.
- Gorodnev, S. See Ismailski, V. A.
- Gorski, F. K., relation between vitrification temperature and mol. wt. of organic compounds, A., 1062. Temperature dependence of the number of crystal nuclei in supercooled liquids, A., 1307. See also Berлага, R. J.
- Gorski, I. M., and Schpanski, V. A., cyclic polymethylene arsenic derivatives. I. and II., A., 637.
- Gorsky, V. S., transitions in the copper-gold alloy. II. Migration of atoms in the copper-gold lattice. III. Effect of strain on the lattice equilibrium, A., 439. Orange modification of mercuric iodide, A., 1089.
- Gorter, C. J., superconductivity of alloys, A., 816.
- and Casimir, H., thermodynamics of superconducting state, A., 154. See also Nordheim, L.
- Gorter, E., crystalline proteins: hormones and enzymes, A., 122. Spreading in a unimolecular film; method for biological problems, A., 270. Spreading of pepsin and of trypsin, A., 294.
- and Ormond, H. van, spreading of myosin, A., 161.
- Ormond, H. van, and Meijer, T. M., spreading of complex proteins, A., 161.
- and Philippi, G. T., properties of albumin in unimolecular layers, A., 29. Influence of time on spreading of proteins, A., 161.
- and Seeder, W. A., apparatus for pressure measurements of spreading substances, A., 467.
- Gorter, F. J., egg-white as sole source of protein and vitamin-B₂ for young rats, A., 545. Depigmentation, a new dietary deficiency disease, cured by copper, A., 1148.
- Gortner, R. A., lake vegetation as a possible source of forage, B., 172.
- See also Aronovsky, S. I., Buckman, S. J., and Linner, E. R.
- Gosch, J. B., and Florida Cane Products Corp., ageing and maturing of raw alcoholic liquors, (P.), B., 377.
- Goslowski, W., and Marchlewski, L., absorption of ultra-violet light by organic substances. XXVIII, A., 145.
- Goss, E. F., Hammer, B. W., and Iowa State Coll. of Agric. & Mechanic. Arts, curing of cheese, (P.), B., 827.
- Goss, F. R., vector analysis of dipole moments, A., 13. Dipole moments of associated liquids, A., 683. Factors modifying polarisation of liquids, A., 917.
- Goss, H., and Gregory, P. W., glutathione concentration of livers and muscles of rats following injection of pituitary growth-hormone, A., 1424.
- See also Gregory, P. W., and Mead, S. W.
- Goss, M. J. See Phillips, Max.
- Goss, N. P., and Cold Metal Process Co., electrical [silicon-steel] sheet, (P.), B., 999.
- Gosselink, J. G. See Richter, G. A.
- Gosset, J. See Delauney, S.
- Gossner, B., and Besslein, J., triple sulphates containing water, A., 1471.
- and Neff, H., crystals of hydrochlorides, hydrobromides, and hydriodides of methylephedrine; crystallographic relations between *dl*-compounds and their components, A., 152.
- and Reindl, E., composition of titaniferous silicates, especially astrophyllite, A., 190.
- Gostynska, A. See Wierzuchowski, M.
- Goswami, H. C., and Sarkar, P. B., triple nitrites of the rare earths and a new micro-test for caesium, A., 1473.
- See also Ray, (Sir) P. C.
- Goswami, M., and Basu, K. L., new constant for fixed oils; hypochlorous acid value, B., 365.
- Shaha, A., and Mukerjee, B., colorimetric test for compounds containing CH, CH₂, or CH₃ contiguous to negative groups, A., 228.
- Goth, E. See Hüchel, W.
- Gotham Co., Ltd., and Haddon, C. L., plaster of Paris compositions, (P.), B., 456. Plastering compositions, (P.), B., 548.
- Gothe, M. See Reiss, M.
- Gotkis, D., and Cloke, J. B., synthesis of 1-cyano-1-methylcyclopropane from diazomethane and α -methylacrylonitrile, A., 210.
- Gotô, H., importance of *p*_H for determination and separation of metals by anthranilic acid, A., 720.
- Goto, K., Michinaka, H., and Shishido, H., sinomenine. XL. (—) and (+)-Bis-1:1'-thebenone, A., 368.
- and Shishido, H., sinomenine. XLI. *d*- and *l*-bis-1:1'- β -Tetrahydrodeoxy-codeine, A., 1138.
- Goto, K. I. See Suganuma, K.
- Gotoh, Y., reduction of ferric oxide by hydrogen and oxidation of metallic iron reduced from ferric oxide, A., 716.
- Gotser, T. See Orahovats, D. P.
- Gottberg, K. von. See Schoenheimer, R.
- Gottdenker, F. See Goldenberg, M., and Silberstein, F.
- Gottlieb, H. B. See Adler, H., and Du Pont de Nemours & Co., E. I.
- Gottlieb, (Miss) M. See Poggi, R.
- Gottschalk, V. H., coercive force of magnetite powders, A., 1309.
- and Davies, Charles W., apparatus for determining magnetic constants of mineral powders, A., 1341.
- and Doan, J. D., reduced ferberite as a substitute for ferrotungsten, B., 103.
- and Wartman, P. S., magnetisation curves for magnetite powders, A., 1309.
- Gottschall, R. See Scharrer, K.
- Gottwick, R. See Alten, F.
- Goubeau, J., ψ -halogens. XXX. Raman effect and constitution of the cyanate residue, A., 851.
- Goucher, F. S. See Bell Telephone Labs.
- Goucher, O. P., experimental [spraying of] orchards, B., 118.
- Goudey, R. F., chlorination of Los Angeles water supply, B., 752.
- Goudschmidt, A., jun., and Summerson, W. H., variable layer photo-electric comparison photometer; new type of photo-electric colorimeter, A., 1475.
- Goudsmit, S. See Bacher, R. F., and Wu, T. Y.
- Goudswaard, A., constituents of *Orthosiphon* leaves, A., 420. Poisonous *Anacardiaceae*, A., 672.
- Gough, G. A. C., purification of tuberculin, A., 408.
- Gough, H. J., and Clenshaw, W. J., testing of lubricants, B., 1081.
- and Sopwith, D. G., atmospheric action in fatigue [of metals], B., 311.
- Gouguell, B. See Coull, J.
- Gould, A. J. See Bleakney, W.
- Gould, C. E. See Hampton, W. M.
- Gould, I., jun. See Trout, C. M.
- Gould, I. A., and Lucas, P. S., separation of whey in ice-cream mixes containing vegetable stabilisers, B., 874.
- Gould, R. G., jun., and Thompson, A. F., jun., synthesis of unsaturated compounds from β -ionone and tetrahydro-ionone, A., 492.
- See also Bent, H. E.
- Gould Storage Battery Corporation. See Chamberlain, R. V.
- Goulden, C. H. See Whiteside, A. G. O.
- Goulston, E. See Bolliger, A.
- Gouner, L. E., and Petree & Dorr Engineers, Inc., sugar, (P.), B., 119.
- Gourdji, C. R., agglomerated fuel, (P.), B., 536.
- Gouzon, B., protoporphyrin in yolk of birds' eggs, A., 510.
- See also Bierry, H., and Timon-David, J.
- Govaert, F., use of liquid hydrogen chloride in preparation of dichloroarsines, A., 997.
- Govaerts, P., and Cambier, P., excretion of glucose, creatinine, and urea following phloridzin administration, A., 117. Excretion of creatinine and glucose in diabetics, A., 515.
- Govakov, V. P. See Tarasov, B. K.
- Govel, S. P., and Vaishya, B. L., complex formation between manganese or aluminium with tartaric acid in alkaline medium, A., 961.
- Govers, F. X., and Indian Refining Co., heat-transfer tube, (P.), B., 49. Vacuum distillation of liquids, (P.), B., 290. Lubricating oil and paraffin wax, (P.), B., 346. Pyrolysis of hydrocarbons, (P.), B., 486. Refining of mineral oil, (P.), B., 713.
- See also Bryant, G. R.
- Govett, E., and Govett, Ltd., photographic emulsion, (P.), B., 1070.
- Govett, Ltd. See Govett, E.
- Govorov, N. P., electrometric determination of carbohydrates and reducing substances in makhorka tobacco, A., 1550.
- Govorova, R. See Galabutskaia, E.
- Gow, C. C., and Morgan Crucible Co., Ltd., pencils, etc., (P.), B., 110.
- Gowens, G. J. See Roeser, W. F.
- Goyle, D. N. See Speers, P. C., and Yajnik, N. A.
- Grabar, P., fractional ultrafiltration of invertase from intestinal juice of the dog, A., 659. Fractional ultrafiltration. I. Preparation of collodion membranes of varying permeability. II. Glass apparatus for ultrafiltration under pressure, A., 1099. Fractional ultrafiltration, A., 1477.
- and Koutseff, A., differentiation of the toxin ricin and of an allergen in castor-oil seeds; preparation of ricinallergen, A., 267.

- Grabar, P., and Riegert, A., ultrafiltration of uraease using membranes of graded porosity, A., 252. Nature of uraease; fractional ultrafiltration, A., 1025. Ultrafiltration of uraease after partial digestion by activated trypsin, A., 1164. Ultrafiltration of uraeases of different origin through membranes of graduated permeability, A., 1164.
- Grabe, F., Krayer, O., and Seelkopf, K., circulatory-active (adrenaline-like) substances in liver extracts, A., 894.
- Grabfield, G. P., and Adams, L. G., nitrogen and sulphur metabolism in Bright's disease. VI. Effect of diets low in sulphur on excretion of sulphur, A., 650.
- Driscoll, M., and Gray, M. G., nitrogen and sulphur metabolism in Bright's disease. V. Metabolic study of a patient with cedema of unknown origin, A., 237.
- See also Gray, M. G.
- Grabow, W. See Lehmann, E.
- Grabowski, C., osmotic pressure and thermal effect of chemical reactions from the viewpoint of technical thermodynamics, A., 169. New interpretation of the Helmholtz equation and of Nernst's theorem, A., 290.
- Grabowsky, O., dipole moment and molecular properties, A., 916.
- and Herold, W., optical investigation of system aldehyde-alcohol in indifferent solvents, A., 694.
- Gračanin, M., influence of light on nutrient intake of plants, A., 549.
- Grace, N. S., hyperfine structure and nuclear moment of cobalt, A., 2. Hyperfine structure of the rare earths, A., 137.
- and Ballard, S. S., hyperfine structure and nuclear moment of niobium, A., 137.
- and McMillan, E., hyperfine structure and nuclear spin of tantalum, A., 137.
- and White, H. E., hyperfine structure and isotopic constitution of tungsten, A., 3.
- See also Crawford, M. F., and Spedding, F. H.
- Gracie, D. S., and Khalil, F., response to manuring of cotton in Egypt, B., 968.
- Rizk, M., Moukhtar, A., and Moustafa, A. H. I., soil deterioration in Egypt, B., 687.
- Rizk, M., Moukhtar, A., Moustafa, A. H. I., Balls, W. L., and Williamson, W. T. H., soil deterioration in Egypt, B., 820.
- Gradinesco, A., and Degan, C., seasonal variations in the muscle- and hepatic nitrogen of the green frog (*Rana esculenta*), A., 644. Seasonal variations in the contents of water, organic and mineral substances of muscle and liver of the frog, A., 1003.
- Degan, C., and Palmhart, H., effect of methyl and ethyl alcohols on blood-pressure, A., 655. Effect of ethyl and methyl alcohols in artificial perfusion, A., 656.
- Gradinesco, E., and Pora, E. A., influence of a continuous electric current on branchial permeability of fresh-water fish, A., 1276.
- Grady, J. H. See Clarke, J. W.
- Grady Manufacturing Co. See Clarke, J. W.
- Graeber, E. G., and Cryder, D. S., catalytic dehydration of formic acid, B., 795.
- Graebner, W. H. See Abrams, A.
- Graefe, E., colour of bitumens, especially [natural] asphalt, B., 437. Purification of used motor [lubricating] oil, B., 1081.
- Gräfinger, G. See Goldschmidt, S.
- Graemiger, B. See Hephaest A.-G. f. motorische Kräftezeugung.
- Graf, A., determination of combustible gases in the air of the uppermost strata of the earth by means of a new apparatus, A., 1341.
- Graf, L., kinetics and mechanism of the allotropic transformation in the Pd-Cu system (X-ray investigation with single crystals containing 40—50 at.-% of palladium), A., 1065.
- and Kussmann, A., diagram of state and magnetic properties of platinum-iron alloys, A., 1199.
- Graf, O., preparation of road concrete, B., 675.
- and Walz, K., influence of various cements on resistance of concrete in corrosive water, B., 229, 456.
- Grafe, K. See Bergmann, M.
- Graff, A., temperature losses in pig iron between blast furnace and converter, B., 62.
- Graff, J. H., new stains and their use for fibre identification, B., 489. Accuracy of fibre analysis, B., 797.
- Graff, M. See Schoenheimer, R.
- Graff, S., and Maculla, A., composition of tissue-proteins. I. Determination of purines in tissues, A., 1044.
- Grafov, D., substituting glycerol in imitation leather by other plasticisers, B., 798. Utilising acid-free pectin in preparation of imitation leather, B., 798. Leather substitute for [boot] uppers, B., 863.
- Grah, H., [non-caking] fertilising salts, (P.), B., 517.
- Graham, A. K., cyanide zinc-plating baths using aluminium-mercury-zinc anodes, B., 460.
- Graham, D. P., and Peabody Eng. Corp., regulating viscosity of liquids, (P.), B., 755.
- Graham, H. See Houston, J.
- Graham, H. M., and Ross Heater & Manufg. Co., Inc., distillation of oil, (P.), B., 217.
- Graham, H. W., grain size of Bessemer steel, B., 549.
- Case, S. L., and Jones & Laughlin Steel Corp., free-cutting steel, (P.), B., 857.
- Graham, J., and Catlow, E. B., adhesives, (P.), B., 242.
- Graham, J. D. See Cool, R. D.
- Graham, J. H., electrical method for checking physiological salt solution, A., 270.
- Graham, M. L. See McHenry, E. W.
- Graham, R. See White, J.
- Graham, Robert. See Torrey, J. P.
- Graham, R. P. See Hopkins, C. Y.
- Graham, S., aetiology of convulsions in early infancy, A., 886.
- Graham, W. A. P., occurrence of narsarsukite in Montana, A., 1478.
- Graham, W. D. See Hill, G. A.
- Graham, W. R. See Taylor, N. B.
- Grahl-Nielsen, O. See Gaarder, T.
- Grain Machinery Co. See Haines, G. H.
- Gramatieri, P., dioximes. CVIII, A., 763.
- Gramenitzki, N. D., compounding bright stocks with lubricating oils, B., 8.
- Lowering solidification temperature and cloudiness of lubricating oils, B., 8.
- See also Nikiforov, L.
- Grandadam, P., direct oxidation of platinum and nitriding of metals (Cu, Al, Mg, Zn, Fe, Ni, and W), A., 1086.
- Grandadam, P. See also Laffitte, P.
- Grandclaude, C., Polonovski, M., Warem-bourg, H., and Driessens, J., [blood-sugar and reducing power in] blood of cancerous subjects during treatment with radium, A., 649. Action of radium on glycolytic activity of neoplastic tissues, A., 1534.
- Grande, F. See Evans, Charles Lovatt.
- Granett, P. See Ginsburg, J. M.
- Granfield, C. O., trend of organic food reserves in lucerne roots as affected by cutting practices, A., 1177.
- Granger, A., use of red selenium glasses as ceramic colours, B., 591.
- Granger, F. S., and Combustion Utilities Corp., cold resinification of phenol alcohols [made from phenol and formaldehyde], (P.), B., 321.
- Granger, R. See Godchot, M.
- Grangers Manufacturing Co. See Franke, E. J.
- Granigg, B., physical purification of quartz sand containing iron, B., 629.
- Grant, A. G. See Whessoe Foundry & Eng. Co.
- Grant, B. H. See Wetherbee, H. E.
- Grant, D. H., and Stanco, Inc., insecticide, (P.), B., 869.
- Grant, D. R. L. See Lilly, C. A.
- Grant, E. M. See McBain, J. W.
- Grant, G. A., metabolism of galactose. I. Phosphorylation during galactose fermentation and its relation to the interconversion of the hexoses. II. Synthesis of lactose by active mammary gland *in vitro*, A., 1016, 1151.
- Grant, J., use of ultra-violet light as a sensitive method for measurement of degree of water-resistance of paper, B., 17. Ultra-violet light as a means of detecting artificial watermarks [in paper], B., 17. Use of fluorescence analysis in ultra-violet light in the food industry, B., 172. Modern methods of analysis: application to water, B., 256.
- and Procter-Smith, H., use of ultra-violet light for detection of traces of sulphides, A., 53.
- See also Dickinson & Co., Ltd., J.
- Grant, K., and Iliffe, M., portable Geiger-Müller tube, A., 189.
- Grant, L. B. See Dow Chem. Co.
- Grant, L. F., and Schube, P. G., effect of dinitro- α -naphthol on blood-cholesterol in man, A., 1159.
- Grant, M. See Fisher, C. H.
- Grant, (Miss) M. I., ultra-violet absorption spectra of stannic halides in various solvents, A., 427.
- Grant, O. E. See Dow Chem. Co.
- Grant, R. D., cleansing preparation, (P.), B., 860.
- Grant, R. F. See Wetherbee, H. E.
- Grant, R. L., and Lewis, H. B., products of partial hydrolysis of silk fibroin, A., 648.
- Grant, W. T., and Medes, G., creatinine clearance during hyperthermia of diathermy and fevers, A., 1401.
- Grantham, H. H., and Ure, W., testing of newsprint with respect to printing quality, B., 1039.
- Grantham, J. See Garner, F. H.
- Grantham, R. I. See Bliss, A. R., jun.
- Grard, J., nitration of starch, A., 478.
- Grasovsky, A., and Schiff, M., effect of ammonium bicarbonate on storage of oranges, B., 378.

- Grasselli Chemical Co., zinc chloride, (P.), B., 226. Hydrated basic sodium metasilicate, (P.), B., 543. Hydrated sodium metasilicate, (P.), B., 544*. Application of organic cyanogen compounds, (P.), B., 762*.
- and Alvord, E. B., fungicides and bactericides, (P.), B., 375.
- and Bolton, E. K., insecticides, (P.), B., 375.
- and Corson, H. P., sulphates of copper and zinc, (P.), B., 306. Copper sulphate from metallic copper and its alloys, (P.), B., 306. Solution of cadmium metal in sulphuric acid in presence of metallic iron, (P.), B., 362.
- Duggan, H., and McHaffie, I. R., apparatus for separation of gases, (P.), B., 834.
- and Larson, L. L., water-resistant alkaline silicate compositions [adhesives], (P.), B., 323.
- and Lemmerman, P. C., mould lubricant for clay products, (P.), B., 1095.
- Lemmerman, P. C., and Remler, R. F., adhesive and film-forming composition, (P.), B., 1092.
- and McQuaid, H. S., soldering flux [for soft solders], (P.), B., 315.
- Salzberg, P. L., and Bousquet, E. W., lauryl [dodecyl] thiocyanate, (P.), B., 348.
- and Schweitzer, W. K., cleaning and protecting [ferrous] metals against rusting, (P.), B., 315. Treatment of metal surfaces, (P.), B., 810.
- and Waddell, M. C., crystallisation of sodium metasilicate hydrates, (P.), B., 494. Sodium pyrosilicate hydrate, (P.), B., 494.
- Grasser, G., chemical-technical problems in the tannery, B., 601.
- Grasset, E., culture of *B. tuberculosis* and BCG in different evolutionary states (granular, filamentous, and acid-resisting and non-acid-resisting bacilli) by means of lysates obtained by repeated freezing, A., 899.
- and Zoutendyk, A., stability of antivenoms, A., 771.
- Grassl, J. See Fischer, H.
- Grassmann, H. See Deines, O. von, and Dietrich, K. R.
- Grassmann, K., and Kohlmeier, E. J., reduction of mixed oxides, A., 593.
- Grassmann, P. See Meissner, W., and Steiner, K.
- Grassmann, W., natural activators of papain, A., 1163.
- and Arnim, K. von, new colour reactions of pyrrolidine and proline. II., A., 1255.
- and Föhr, F., reaction of [quebracho-tanned] leather to oxygen. I., B., 963.
- Klenk, L., and Peters-Mayr, T., affinity relations of animal and vegetable dipeptidases, A., 1537.
- and Lang, O., chromatographic [fluorescence] adsorption analysis of [natural and synthetic] tanning materials, B., 513. Chromatographic [fluorescence] adsorption analysis of [vegetable] tannins, B., 1007.
- and Schleich, H., collagen. II. Carbohydrate content, A., 771.
- Grassner, F. See Lucas, R.
- Gratcheff, A., purifying exhaust gases of internal-combustion engines, (P.), B., 1122.
- Gratia, A., centrifuging of bacteriophages, A., 409.
- Gratscheva, A. F. See Sementschenko, V. K.
- Gratton, G. G., and Ramage, G. R., electrolytic reduction of $\alpha\alpha'$ -dicyano- $\beta\beta'$ -dimethylglutarimide, A., 737.
- Gratz, O., preparation of crustless cheese, B., 285.
- Gratzianov, A., regeneration of activated charcoal with hydrochloric acid, B., 437.
- Gratzianski, N. N., purification of anhydrous aluminium chloride, B., 723. Chromium-plating of the interior surface of small hollow iron articles, B., 729.
- and Ivanov, K. N., corrosion of steel in water vapour at high temperatures and pressures, B., 1048.
- See also Plotnikov, V. A.
- Grauze, O., examination of leaves of *Arctostaphylos uva ursi*, Sprengel, grown in Latvia and influence of the seasons on constituents, B., 1022.
- Gravell, J. H., and Amer. Chem. Paint Co., material for removing soldering fluxes, (P.), B., 1051.
- Graves, G. De W. See Du Pont de Nemours & Co., E. I.
- Graves, J. E. See Clark, J. d'A.
- Graves, M. See Kirrmann, A.
- Graves, R. R. See Hodgson, R. E.
- Gray, A. M., and Gray Processes Corp., refining of hydrocarbons, (P.), B., 11.
- Gray, A. W., comminuted alloy [for dental amalgams], (P.), B., 908.
- Gray, C., gas calorimeter, (P.), B., 88.
- Gray, C. G., petroleum derivatives of interest to the paint and varnish industry, B., 464.
- Gray, C. H., products of hydrolysis of glycogen, A., 1110.
- Gray, D., Murray, W. S., and Oneida Community, Ltd., copper-indium alloys, (P.), B., 908.
- and Oneida Community, Ltd., alloys [dental amalgams], (P.), B., 858.
- See also Murray, W. S.
- Gray, F. W., and Cruickshank, J. H., accuracy of the Curie-Chéneveau magnetic balance, A., 321. Diamagnetism of light and heavy water, A., 435.
- Gray, H., and Goodrich Co., B. F., [thermo-plastic] composition [containing rubber] and its manufacture, (P.), B., 961.
- Gray, H. H., oxidation of ethane, A., 40.
- Gray, H. Le B. See Eastman Kodak Co.
- Gray, J. A., β - and γ -rays of radium-D, A., 677. Scattering of X-rays at small angles, A., 685.
- Gray, J. W., and De Florez, L., steam-column still, (P.), B., 1026.
- See also Texas Co.
- Gray, K., improvement of drainage and water-pipes by the use of lead alloys, B., 1024.
- Gräy, K. R., Brauns, F., and Hibbert, H., lignin and related compounds. XIV. Action of lead tetra-acetate and of mercuric acetate on glycol-lignin, A., 1373.
- King, E. G., Brauns, F., and Hibbert, H., lignin and related compounds. XII. Structure and properties of glycol-lignin, A., 1373.
- Gray, M. G., and Grabfield, G. P., denervated kidney. II. Action of sodium salicylate on uric acid, allantoin, sodium chloride, and total nitrogen excretion in dogs, A., 245.
- Gray, M. G. See also Grabfield, G. P.
- Gray, P. H. H., and Atkinson, H. J., microbiology of Appalachian upland podsol soils. I. Effects of physical and chemical treatments, B., 1010.
- Gray, R. A. H., and Brooks, H. E., spraying trials against the raspberry beetle, B., 869.
- Gray, S. C., and Melville, H. W., inert gas effects at the lower explosion limit of phosphine-oxygen mixtures, A., 307.
- Gray, T. T., and Gray Processes Corp., degumming of hydrocarbons, (P.), B., 11. Purification of hydrocarbon compounds, (P.), B., 583.
- Gray Processes Corporation, refining liquid products of destructive distillation of coal, (P.), B., 87.
- See also Dickinson, E. A., Gray, A. M., Gray, T. T., and Mandelbaum, M. R.
- Graymore, J., action of benzoyl chloride and of hydrogen sulphide on cyclic methylenamines, A., 1385.
- Graziadei, A., salt systems of Chili nitrate mineral, B., 848.
- Greaves, C., clarification of water, etc., containing solid particles, (P.), B., 80.
- Greaves, H. J., regulating and conserving the circulating water in a coal-washing plant, (P.), B., 1082.
- Greaves, J. D., and Schmidt, C. L. A., absorption and utilisation of carotene and vitamin-A in choledochocolonostomised vitamin-A-deficient rats, A., 1427. Utilisation of carotene by jaundiced and phosphorus-treated vitamin-A-deficient rats, A., 1427.
- Greaves, J. E., arsenic content of soils, A., 61.
- Greaves, R. H., irregular impact figures [on metals], B., 678.
- Grebe, J. J. See Dow Chem. Co.
- Grebenschtschikov, I. V., and Krasikov, S. E., temperature of sintering of glass, B., 22.
- Gredy, (Mlle.) B., Raman effect and organic chemistry; γ -cyclopentyl- Δ^2 -propine and its derivatives; tri-substituted ethylenes; *cis-trans*-isomerism of ethylenic compounds CHMcCHR; classification of the radicals R, A., 73, 957. Application of Raman spectrography to study of the acetylenic linking, A., 1221.
- and Piaux, L., application of Raman spectrography to allylic transformation and *cis-trans* isomerism of crotonyl derivatives, A., 197.
- Green, A. See Salter, W. T.
- Green, A. (Newcastle). See Clews, F. H.
- Green, A. A., Cohn, R. J., and Blanchard, M. H., physical chemistry of proteins. XII. Solubility of human haemoglobin in concentrated salt solutions, A., 878.
- Green, A. G. See Coplans, M., and Williams, (Hounslow) Ltd.
- Green, A. T. See Clews, F. H.
- Green, C., and Bradt, W. E., preparation of hydrogen selenide by interaction of selenium and hydrocarbons, A., 313.
- Green, C. B. See Jessup, R. S.
- Green, D. E. See Ogston, F. J.
- Green, E. L. See Goldworthy, M. C., and Roberts, J. W.
- Green, H. H., Allcroft, W. M., and Montgomerie, R. F., hypomagnesemia in equine transit tetany, A., 1270.
- See also Allcroft, W. M.
- Green, H. L., sampling dusts, B., 81.

- Green, J. B., and Barrows, W. M., *jun.*, Zeeman effect of spectra of arsenic, A., 271.
- and Loring, R. A., second-order Zeeman effect in arc spectrum of mercury, A., 137. Paschen-Back effect. II. *JJ*-coupling (approx.), A., 137.
- Green, L. See Williams, J. W.
- Green, Louis. See Newman, A. B.
- Green, L. P., crusher, (P.), B., 609.
- Green, S. J. See Imperial Chem. Industries.
- Green, T. G., and Hilditch, T. P., identification of linoleic and linolenic acids, A., 998. Occurrence of an octadecadienoic acid in cow butter-fats, A., 1005.
- Green & Co., (Ecclesfield) Ltd., W., Warren, E., Taudevin & Gregson, Ltd., and Webster, J. H., lehrs for annealing glass-ware, (P.), B., 1095.
- Greenbaum, F. R., separation of large amounts of tyrosine from cystine, A., 877.
- Greenberg, B. E., Bordny, M. L., Davis, T. L., and Armstrong, C., methylene-blue in treatment of urinary tuberculosis with presentation of a purified drug, A., 1403.
- Greenberg, D. M., Anderson, C., and Tufts, E. V., closed titration flask for use in bromometric determination of magnesium with 8-hydroxyquinoline; application to determination of magnesium in tissue and urine, A., 1473.
- and Larson, C. E., evidence of adsorption experiments on the forms of calcium and inorganic phosphorus in blood-serum, A., 880. Physical chemistry of proteins in non-aqueous and mixed solvents. II. Electrochemical properties of protein solutions in glacial organic acids, A., 933.
- Larson, C. E., and Tufts, E. V., colloidal calcium phosphate of blood and calcium partition in serum, A., 1001.
- See also Moberg, E. G.
- Greenberg, J. See Rice, F. O.
- Greenberg, L. A. See Haggard, H. W.
- Greenblatt, M. See Goldring, W.
- Greene, C. H., Shattuck, H. F., and Kaplowitz, L., phosphatase content of blood-serum in jaundice, A., 887.
- Greene, D. J. See Baird, F. D.
- Greene, E. S. See Parks, G. S.
- Greene, G. U., drosses from the lead blast furnace, B., 312.
- Greene, H., [Sudan Government agricultural] report, 1932-1933, B., 514.
- Greene, H. C., and Fred, E. B., maintenance of vigorous mould stock cultures, A., 254.
- Greene, R., composition of alveolar air on Everest, 1933, A., 507.
- Greene, R. A., protein synthesis by *Azotobacter*, A., 1028.
- Greene, S. W., effect of annual grass fires on organic matter and other constituents of virgin long-leaf pine soils, B., 964.
- Greenewalt, C. H. See Du Pont de Nemours & Co., E. I.
- Greenfield, G. J., Thorncliffe Coal Distillation, Ltd., and Woodall-Duckham (1920), Ltd., charging means for coke ovens, (P.), B., 615.
- Greengard, H. See Jung, F. T., and Voegtlin, W. L.
- Greenhalgh, R. See Imperial Chem. Industries.
- Greenhill, W. L., experimental kiln for air-flow investigations [in timber seasoning], B., 150.
- Greenslade, R. M., Masee, A. M., and Roach, W. A., causes of immunity to the apple woolly aphis (*Eriosoma lanigerum*, Hausmann), A., 1436.
- Greenslade, W. R., pasteurising or sterilising apparatus, (P.), B., 882.
- Greenspan, J., Liotta, S., and La Mer, V. K., hydrolysis of ethyl iodide, A., 710.
- See also La Mer, V. K.
- Greenstein, J. P., multivalent amino-acids and peptides. I. Synthesis of quadrivalent amino-acids and their derivatives. II. Synthesis of derivatives of lysylglutamic acid, A., 850.
- and Joseph, N. R., multivalent amino-acids and peptides. IV. Apparent dissociation constants of α -aminotri-carballylic acid and of glycyl- α -aminotricarballylic acid, A., 1203.
- Wyman, J., *jun.*, and Cohn, E. J., multivalent amino-acids and peptides. III. Dielectric constants and electrostriction of the solvent in solutions of tetrapoles, A., 694.
- Greenup, H. W., and Firestone Tire & Rubber Co., microporous rubber, (P.), B., 322.
- Greenwald, C. K., and Harde, E., vitamin-C and diphtheria toxin, A., 1429.
- See also Karelitz, S.
- Greenwood, A. W., Blyth, J. S. S., and Callow, R. K., quantitative studies on response of the capon's comb to androsterone, A., 1033.
- Greenwood, D. A., Hewitt, E. A., and Nelson, V. E., effect of fluorine on blood and respiration, A., 531. Effects of fluorine on respiration, blood-pressure, coagulation, and blood-calcium and -phosphorus in the dog, A., 1021.
- See also Ostrem, C. T.
- Greenwood, James. See Greenwood, John.
- Greenwood, John, Greenwood, James, and Holgate, J. B., apparatus for separation of powdered or granular materials, (P.), B., 83.
- Greenwood, J. N., influence of impurities on properties of lead. II. Effect of heat treatment on mechanical properties of commercial lead, B., 458.
- Greenwood, J. R. See Speakman, J. B.
- Greenwood & Batley, Ltd., and MacLagan, J. C. M., rotary machines for expressing liquid from moist materials, (P.), B., 754.
- Greep, R. O., separation of a thyrotropic from the gonadotropic substances of the pituitary, A., 902.
- See also Lane, C. E.
- Greer, P. S. See Carbide & Carbon Chemicals Corp.
- Greger, H. H., production of electricity by means of a fuel cell, (P.), B., 415.
- Gregg, A. W., Frank, R. H., and Bonney-Floyd Co., wear-resisting ferrous alloy, (P.), B., 907.
- Grégoire, R., Bragg curve of *H*-rays, A., 1047.
- Gregor, J. B. See Wetlaufer, L. A.
- Gregory, C. H. See Imperial Chem. Industries.
- Gregory, E., deoxidation of steel, B., 498.
- Gregory, F. G., physiological problems in culture of cotton in the Sudan, B., 821.
- Gregory, G. See Chapman, D. I.
- Gregory, H. S., effect of temperature on thermal conductivity and accommodation coefficient of hydrogen, A., 691.
- Gregory, P. W., and Goss, H., pituitary growth-hormone and glutathione concentration, A., 1032.
- See also Goss, H.
- Gregory, T. G. See Berchin, N. U.
- Gregson, W., waste-heat recovery from [gas]-retort settings, B., 612.
- Greifinger, S., saponins of *Chenopodium ambrosioides*, L., A., 1040.
- See also Dafert, O.
- Greig, D. See Thiel, A.
- Greig, J. L. See Buckley, T. A.
- Greig, J. R. See Dryerre, H.
- Greig, J. W., Posnjak, E., Merwin, H. E., and Sosman, R. B., equilibrium of Fe_2O_3 , Fe_2O_3 , and oxygen, A., 1322.
- Greim, G. E., control of calorific value [of gas] in retort operation, B., 789.
- Greiner, E. S. See Bell Telephone Labs.
- Greiner, H. See Fluch, M.
- Greisheimer, E. M., sexual differences in fasting blood-sugar, A., 509.
- Gremels, H., and Zinnitz, F., potential action of acetylcholine, A., 1421.
- Greninger, A. B., twinning in α -iron, A., 811. Crystallographic uniformity of lineage structure in copper single crystals, A., 812.
- Gress, G. C., and Fiberloid Corp., seasoning of pyroxylin plastic, particularly sheets, (P.), B., 223.
- Greth, A., pyro- and hydro-abiotic acids, A., 218.
- Grethe, K., and Stoecker, J., reducibility of the Dwight-Lloyd sinter and its application to ore preparation, B., 727.
- Grethe, T. C., tea entirely or almost entirely free from theine, (P.), B., 605.
- Gretschni, J., petro-chemical nature of the active deposits of Mariupol, in connexion with their exploitation as raw materials in the silicate industry, B., 725.
- Greval, S. D. S., concentration of antivenen by the ammonium sulphate method, A., 1144.
- Grevel, A. See Hänsel, G.
- Grevener, H. See Pulewka, P.
- Greville, G. D., and Stern, K. G., reduction of dinitrophenols by redox indicators and enzymes, A., 401.
- See also Dickens, F.
- Grévy, J., viscosity of very dilute solutions of cellulose nitrate in ether-alcohol, A., 581.
- Grewe, H. See Royen, H. J. van.
- Gribnau, F. B., doubly refracting selenium sol, A., 296.
- Griboedov, D. N., action of sulphur dioxide on strength of cotton yarn dyed with sulphur-black, B., 302. Waterproofing of wool fibres by means of aluminium hydroxide and aluminium salts, B., 989.
- and Abozin, V. G., determination of the degree of carbonisation of wool fibres, B., 986.
- Griebel, C., imitation truffle preparations manufactured from *Lactaria*, B., 826. Harmlessness of modern hair-dyes, B., 847.
- Grieff, L. J. See Urey, H. C.
- Griem, W. B., Killian, M. J., Clifcorn, L. E., Thompson, W. S., and Gundlach, E., effect of calcium and phosphorus variations and source of experimental chicks on assay of vitamin-D carriers, A., 1287.
- Griese, A. See Warburg, O.

- Grieve, W. S. M., and Hey, D. H., amphoteric aromatic substitution. I. Reactions of sodium benzenediazoate and nitrosoacetanilide, A., 78. Oxidation of 2- and 4-nitro-4'-methylphenyl with chromyl chloride, A., 344. Rate of decomposition of *p*-substituted nitrosoacetanilides in benzene, A., 828.
- Griffin, A. E., efficiency of the ammonia-chlorine process [for water purification], B., 128. Evaluation of residual chlorine [in water], B., 928.
- Griffin, C. W., adsorption of hydrogen by supported copper poisoned with carbon monoxide, A., 1068.
- Griffis, R. O., and Amer. Rolling Mill Co., galvanising metal [iron] sheets, (P.), B., 273.
- Griffith, A. A., and Helmore, W., treatment of lubricating oils, (P.), B., 346. See also Helmore, W.
- Griffith, C. F. See Robertson, G. J.
- Griffith, F. R., jun., and Emery, F. E., metabolic effects of clamping visceral arteries, splanchnic vaso-constriction, and adrenal and hepatic stimulation, with special reference to calorogenic action of adrenaline and sympathin, A., 1405. See also Bowen, B. D.
- Griffith, G. See Martin, W. S.
- Griffith, R. H., and Hill, S. G., catalysis in hydrocarbon chemistry. III. Adsorption by hydrogenation catalysts, B., 292. and Plant, J. H. G., catalysis in hydrocarbon chemistry. II. Decomposition of low-boiling hydrocarbons, B., 292. See also Gas Light & Coke Co., and Hollings, H.
- Griffith, R. O., and McKeown, A., kinetics of reaction between potassium thiocyanate and iodine in aqueous solution, A., 828.
- Griffith Laboratories. See Seifert, K. M.
- Griffiths, D. C. See Jones, W. J.
- Griffiths, E., Cayzer, L. S., Norris, G. W., and Wenholz, H., quality of Australian wheat, and its improvement. VI. Experimental baking tests: their value and interpretation, B., 1065.
- Norris, G. W., and Wenholz, H., quality of Australian wheat, and its improvement. IV. Milling qualities. V. Dough characters and baking quality, B., 1065.
- Griffiths, Ezer. See Sherratt, G. C.
- Griffiths, G. J., and Race, J., punctate basophilia in rheumatic cases after chrysotherapy, A., 1403.
- Griffiths, H., properties and applications of adsorptive carbons, B., 789.
- Griffiths, J. G. A., and Norrish, R. G. W., induction period of photochemical reaction between hydrogen and chlorine, A., 46.
- Griffiths, J. H. E., mean lives of excited hydrogen atoms, A., 274. See also Collie, C. H.
- Griffiths, R., subcutaneous effects during scaling of steel, B., 1047.
- Grigaut, A., dissociation of the lipoprotein complex in serum by alcohol; extraction of lipins, phosphoaminolipins, and cholesterol, A., 1261. and Bettend, E., physico-chemical factors in the interferometric technique of Hirsch, A., 785.
- Griggs, H. P. See Reardon, A. J.
- Griggs, V. H. See Burr, W. F.
- Grignon, C. E. See Rathery, F.
- Grigoriev, A. T., palladium-manganese alloys, A., 576, 1456.
- Grigoriev, D. P., artificial preparation of biotite, A., 602. Physical studies of manganous hydroxides, pyrochroite, and bäckströmite, A., 1346.
- Grigoriev, V. M. See Voroschcov, N. N.
- Grigorov, O. N. See Nikolski, B. P.
- Grilikhes, B., chromal, B., 403.
- Grillet, N. B., and Soc. Usines Chim. Rhône-Poulenc, [di]sulphonation [of benzene], (P.), B., 218.
- Grilli, J. P., combined gas-washing and sludge-recovery apparatus, (P.), B., 883.
- Grillo Handelsges.m.b.H., treatment of zinc oxide, (P.), B., 629.
- Grillot, E., lead acetatochloride, A., 50. Lead acetatobromide, A., 1089.
- Grim, R. E., petrology of kaolin deposits near Anna, Illinois, A., 725. [with Kerr, P. F., and Rees, O. W.], petrology of Pennsylvanian shales and non-calcareous underclays associated with Illinois coals. I.—III., A., 603, 725.
- Grimard, L. See Nattan-Larrier, L.
- Grimes, G. J. See Shands, E. H.
- Grimm, H. G., rational systematisation of chemical compounds, A., 1057. and Wolff, H., heat of formation and stability of chain compounds, A., 448. See also Standard-I. G. Co.
- Grimme, C. See Heller, H.
- Grimmer, W., milk and metals, B., 825.
- Grimmett, L. G. See McLennan, J. C.
- Grimmett, R. E. R., and Shorland, F. B., characteristics of "limonites" used in cure and prevention of bush sickness, B., 168.
- Grimwade, M. See Chattaway, F. D.
- Grinberg, A. A. See under Grünberg, A. A.
- Grinberg, B., and Da Silva, A. M., ionisation curves for CF_4 and SF_6 due to Po α -radiation, A., 558.
- Grinling, G. N., commercial ground almonds and their adulteration, B., 781.
- Grinnan, A. B. See Myers, W. K.
- Grinten, W. van der. See Degard, C.
- Grisard Laboratories, Inc. See Dyas, C. S.
- Grischkevitch-Trochimovskii, E., new *N*-substituted *C*-derivatives of barbituric acid, A., 223. Synthesis of hydrastinine chloride on a technical scale, B., 477.
- Grischkun, E. V. See De Kolosovski, N. A.
- Grischott, D. See Chiron, D.
- Griscom-Russell Co. See Price, J.
- Grist, R. A. S. See Murray, H. D.
- Griswold, E. See Davidson, A. W.
- Grivet, P. See Bruhat, G.
- Grivet-Meyer, (Mme.) T., absence of appreciable γ -radiation from impact of fast neutrons on protons, A., 1441.
- Grijaznov, N. S., coking properties of Kiselevsk coals, B., 1078.
- Grodzinski, P., diamond in hardness-testing, B., 593.
- Grodzovskaja, R. I., and Lutzenko, N. A., application of setting inhibitors for cement in cementing of bore holes, B., 228.
- Grodzovski, M. K., and Tschuchanov, Z. F., gasification of fuel by air enriched with oxygen, B., 389.
- Gröbner, W. See Brückner, H.
- Groenewald, J. W. See Du Toit, P. J.
- Groenewoud, P., and Robinson, R., fission of aryltrimethylammonium chlorides in aqueous solution by means of sodium amalgam, A., 76.
- Grönwall, A., importance of the relationship between blood-protein concentration and the so-called colloidal osmotic pressure, A., 642.
- Groesbeck, W. M., isolation of streptococci from milk, A., 663.
- Groetzinger, G., effect of magnetic field on crystal photo-effect, A., 429. Influence of an electric field on thermal conductivity of a solid, A., 923. and Frey, R., change of thermal conductivity of non-polar gases, of liquids, and solids owing to an electric field, A., 691.
- Groetzner, E., determination of plant-assimilable potassium [in soils], B., 37.
- Groff, F., and Bakelite Corp., moulded articles containing inserts, (P.), B., 915.
- Groggins, P. H., and Nagel, R. H., Friedel-Crafts reaction; preparation of ketones and keto-acids, A., 215.
- Nagel, R. H., and Stirtion, A. J., condensation of carboxylic acids, A., 214.
- Nagel, R. H., and Wallace, H. A., ketones, (P.), B., 443.
- Groh, C., and Faltin, E., heterogeneity of casein, A., 1523.
- Groh, E., low-temperature coke from brown coal and its utilisation, B., 436. Comparison of external and internal heating processes of low-temperature carbonisation, B., 755.
- Grohn, H., thickening of ground red lead and preparation of non-setting red lead, B., 1102.
- Groll, H. P. A., and Burgiu, J., acetylene, (P.), B., 343. See also Bataafsche Petroleum Maats., and Shell Development Co.
- Grollman, A., and Firor, W. M., adrenal. VII. Relation of the adrenal cortical hormone to the vitamins, A., 666.
- Firor, W. M., and Grollman, E., adrenal. VIII. Preparation of adrenal cortical hormone suitable for oral administration, A., 789.
- Shumacker, H. B., jun., and Howard, E., administration of the oestrogenic substances in urine, A., 1285. See also Firor, W. M.
- Grollman, E. See Grollman, A.
- Gromov, B. V. See Iskoldski, I. I.
- Groncibi, V., action of X-rays on yeast fermentation, A., 785.
- Gronningsater, A., Gill, J. R., and Mott, R. C., [nickel-copper] metallurgy at Falconbridge, B., 770.
- Gronover, A., chemical and physical methods of determining [ethyl] alcohol in blood, A., 1142.
- Gronow, H. E. von. See Schwiete, H. E.
- Groocock, (Miss) C. M. See Bone, W. A.
- Groombridge, W. H. See Brit. Celanese.
- Grooten, O., and Bezssonoff, N., sensitivity of the influenza bacillus against vitamin-C and quinol, A., 1542.
- Gropengiesser, K., margarine, (P.), B., 252.
- Gros, R., sensitive test for phosphorus, A., 1215. Stable colorimetric scale for rapid determination of nitrates in water, A., 1337. Determination of hexamethylene-tetramine, A., 1356.
- Grosblat, E. S. See Morozov, N. M.
- Groschev, L. V., spectral distribution of photo-current in colloidal coloured alkali halide crystals, A., 282. Crystal photo-effect in naturally coloured rock-salt crystals, A., 566. Influence of the medium on photo-electric effect from metal to dielectric, A., 1293.

- Groscurth, G., and Havemann, R., carb-
hæmoglobin of reduced hæmoglobin, A.,
1260.
- Gross, B., analysis of absorption curves of
cosmic rays, A., 278.
See also Gardner, W. H.
- Gross, E., and Vuks, M., quasi-crystalline
structure of liquids and the Raman
effect, A., 281. Phenomenon of
"wings" and the vibrational Raman
effect in benzene and naphthalene
crystals, A., 564, 914.
See also Vuks, M.
- Gross, E. G., and Pierce, I. H., effect of
morphine on oxygen consumption of
brain-tissue in the rat, A., 528.
- Gross, G., colouring of copper alloys with
"black pickle," B., 458.
- Gross, H. See Necheles, H.
- Gross, H. (Breslau). See Sauerwald, F.
- Gross, H. (Heidelberg), and Hauser, J.,
simultaneous determination of dielectric
constants and conductivity of conductors
at high frequency (two-phase bridge),
A., 1476.
- Gross, H. H. See Texas Co.
- Gross, J., explosion shattering of iron ores,
B., 103.
- Gross, P., and Halpern, O., theory of gal-
vanic potentials. I., A., 1205.
and Steiner, H., micro-thermal conductiv-
ity apparatus for gas analysis, A.,
320.
See also Fink, A., and Halpern, O.
- Gross, P. M., Dixon, L. F., and Hall
Tobacco Chem. Co., reducing nicotine
content of tobacco, (P.), B., 924.
See also Darkis, F. R.
- Gross, R. R., and Xylos Rubber Co., dis-
integration and devulcanisation of rubber
scrap, (P.), B., 370.
- Gross, W. H. See Dow Chem. Co.
- Gross-Selbeck, C., prevention of injury
from excess vitamin-D by feeding vit-
amin-A, A., 1177.
- Grosse, A. von, at. wt. of protoactinium,
A., 5. Preparation of protoactinium,
A., 460. Chemical properties of ele-
ments 93 and 94, A., 559. Yields in
preparation of protoactinium, A., 1214.
and Agruss, M. S., Fermi's element 93,
A., 7. Identity of Fermi's reactions
of element 93 with element 91, A., 559.
Use of artificial radioactive elements
as indicators in chemical investiga-
tions, A., 595. Technical extraction
of protoactinium, B., 590.
See also Ipatiev, V. N., Pierce, W. C.,
and Universal Oil Products Co.
- Grossfeld, J., investigation of marzipan
and persipan containing invert sugar,
B., 375. Determination of yolk con-
tent of egg liqueurs, B., 696. Chem-
istry of hen's egg, B., 875.
- and Hoth, W., determination of fat in
cheese, B., 426.
- and Kanitz, H. R., detection of coal-tar
dyes in hens' eggs, B., 875.
- and Lindemann, E., examination of
cacao; chloride, calcium, and mag-
nesium contents of cacao bean, B., 428.
Formation of oxalic acid by hydro-
lysis of constituents of cacao, B., 428.
and Peter, J., detection of margarine
and hardened oil in foodstuffs, B., 159.
Detection of spoiled eggs, B., 427.
and Walter, G., determination of lecithin-
phosphoric acid in aqueous foodstuffs,
B., 43.
- Grossiord, A. See Tinel, J., and Ungar, G.
- Grossman, H., and Amer. Lead Pencil Co.,
lead pencils, (P.), B., 1103.
- Amer. Lead Pencil Co., and Faber Pencil
Co., E., pencil lead, (P.), B., 735.
- Grossman, M. A., grain size in metals, with
special reference to grain growth in
austenite, B., 549.
- Grossmann, H., cause of wilt in flax, A.,
554. Saccharification of wood, B., 969.
- Grossmann, O. See Lukes, R.
- Grossu-Herrmann, H., variations of quan-
tity of tannin during development of
gall-nuts of oak, A., 269.
- Groth, B. S., and Blomqvist, G. H., fur-
fural[dehyde], (P.), B., 297.
- Groth, W., smokeless fuel briquettes capable
of easy ignition and of free burning, (P.),
B., 1033.
- Grotian, W., and Rambauske, W., for-
bidden O₁ lines in the spectrum of Nova
Herculis 1934, A., 675.
- Grout, F. F., composition of African
granitoid rocks, A., 1101.
- and Longley, W. W., relations of anortho-
site to granite, A., 602.
- Grove, C. J. See Grove, C. T.
- Grove, C. T., and Grovo, C. J., biochemical
aspect of dental caries, A., 382.
- Groves, A. W., determination of small
amounts of copper in rocks, A., 597.
Charnockite series of Uganda, A., 1102.
- Groves, L. G., and Sugden, S., dipole
moments of vapours. II., A., 1056.
- Groves, W. W. See I. G. Farbenind.
- Gruba, A. F. See Kutushev, J. M.
- Grubb, A. C., and Van Cleave, A. B., active
hydrogen, A., 590.
See also Senkus, M.
- Grubb, W. J. See Read, J.
- Grube, G., and Heintz, G., formation of
barium aluminates from barium car-
bonate and alumina in the solid state,
A., 1469.
- and Klaiber, H., electrical conductivity
and equilibrium diagram of binary
alloys. XV. System lithium-lead,
A., 23.
- and Meyer, E., electrical conductivity
and equilibrium diagram of binary
alloys. XVI. System lithium-tin, A.,
23.
- and Winkler, O., magnetic study of the
system cobalt-palladium, A., 291.
- and Wolf, W., alloys of lithium with
mercury and indium, A., 1314.
- Gruber, C. M., and Brundage, J. T.,
comparison of actions of morphine and
dihydromorphinone (dilaudid) hydro-
chloride on the intact small intestine of
the dog, A., 528.
- Gruber, H. See Brückner, H., and Ulzer,
F.
- Gruber, Z. See Molnár, István.
- Grubitsch, H., reactions in galvanising of
iron. III. Determination of dependence
on temperature of solubility of nickel,
chrome, and manganese steels in zinc,
B., 191.
- Grudin, I. N., heat of the reaction of
causticising by Lowig's method, B., 99.
- Gruehl, H. L. See Ratner, B.
- Grün, P., creep limit of steels as a function
of composition and heat treatment, B.,
103. Effect of alloyed metals and of
heat treatment on strength of steels
under continuous load, B., 1145.
- Grün, R., weathering of buildings in
Munich, B., 357. Composition and
stability of 1850-years-old concrete, B.,
407.
- Grünberg, J. A., and Ptitin, B. B., electro-
titration of platinum and iridium, A.,
464.
- Schulman, V. M., and Chorunshenkov,
S. I., conductivity of complex com-
pounds of palladium, A., 449.
- and Volstein, L. M., mechanism of action
of glycine on potassium platinichloride,
A., 1110.
- Grünberg, T., and Schade, H., influencing
of the dopa-reaction by vitamin-C, A.,
670.
- Gründer, W., influence of granulation or
free surface on gluten and gassing charac-
teristics of wheat flours. I., B., 520.
Characteristics of flours according to
baking quality: gassing curves of
[wheat] flour streams, B., 651.
- Grüneisen, E., and Hoyer, H., velocity of
elastic waves in the mercury crystal
and the characteristic temperature calcu-
lated therefrom, A., 690.
- Grünenwald, O., influence of a single heavy
application of fertilisers, and of local
variations in soil composition, on occur-
rence and development of *Asotobacter*
chroococcum, B., 967.
- Grüner, H. See Brigl, P.
- Gruenman, V., colorimetric determination
of starch in paper, B., 447.
- Grünsteidl, E., and Fromm, E. [with
Bauer, F.], aleurone [layer of wheat and
rye] and its utilisation, B., 745.
- Grüssner, A. See Reichstein, T.
- Gruhn, A. See Liebermann, H.
- Grum-Grshimailo, S. See Vedenceva, N.
- Grumell, E. S., evaluation of coal, with
particular reference to small coal for
steam-raising, B., 388.
- Grumpelt Propellerbau G.m.b.H., applying
a metallic coating to the surface of wood,
(P.), B., 994.
- Grundlach, H. R., and Central Commercial
Co., coloured roofing granule, (P.), B., 189.
- Grundmann, W., and Hellmich, R., potenti-
ometric determination of hypophosphoric
acid in presence of phosphoric acid and
phosphorous acid, A., 948.
- Grundström, B., band spectra of calcium
hydride. III., A., 1187.
- Grundy, J. G., fastness to light of synthetic
dyes on paper, B., 222.
- Gruneid, E., dyeing feathers for toy-
making, B., 19.
- Gruner, E., alkali aluminium silicates.
VIII. Validity of Hüttig's equation for
permutites. IX. Silicate component
of ultramarine, A., 168, 1470. System
ultramarine-sulphur, A., 1204.
and Förster, J., alkali aluminium silicates.
X. System ultramarine silicate-sul-
phur, A., 1462.
See also Büssem, W., and Förster, J.
- Gruner, J. W., magnetite cementing certain
ore conglomerates of the Mesabi range,
A., 727. Structures of vermiculites
and their collapse by dehydration, A.,
841. Structural relationship of non-
tronites and montmorillonite, A., 1345.
- Grunewald, M. E. See Uhle, D. J.
- Grunfeld, M., reactivity of alkylmalonic
esters, A., 961.
- Grunow, H. See Leuchs, H.
- Grunsky, H. See Krüger, D.
- Gruse, W. A., and Gulf Refining Co.,
sealing liquid [for waterless gasholders],
(P.), B., 1033.
- Gruzewska, Z., and Béraut, E., extraction
and preservation of α -lipase of blood-
serum, A., 1025.

- Gruzewska, Z., and Roussel, G., disappearance of fatty acids in presence of serum-protein, A., 373.
See also Roussel, G.
- Gruzel, F., improvement in quality by use of cooking salt in the baking industry, B., 42.
- Grzycki, S., muscle chemistry and insulin, A., 538.
- Gschöpf, R., natural-coloured images on paper, films, etc., (P.), B., 783, 925.
- Gstirner, F., determination of essential oil in camomile flowers, B., 429.
- Gualtierotti, G., dichromatic recording and projection of images in natural colours, (P.), B., 175.
- Guanzon, G. A., clarification [of sugar juice] and rôle of the colloids, B., 200.
- Guareschi, G., detection of mercury in bullet wounds, A., 247.
- Guareschi, P., effect of germanium in electrolysis of zinc sulphate solutions, B., 154. Thermal characteristics of the lead chamber in relation to the intensity coefficient, B., 268.
- Guarnieri, P., direct quantitative analysis of limestones, lime, and cements for estimating the Vicat modulus, B., 24.
- Guastalla, (Mme.) J., oxidation-reduction process at the surface of a diaphragm (of kaolin) interposed in a copper solution during electrolysis; factors determining its speed of appearance, A., 1211.
- Gubarev, B. See Chudjakov, I.
- Gubelmann, H., chlorine treatment of drinking water of the city of Berne, B., 432.
- Gubelmann, I. See Du Pont de Nemours & Co., B. I.
- Gucker, F. J., jun., and Rubin, T. R., apparent molal isochoric heat capacity of electrolytes, A., 304.
- Gudakovski, A. See Kotov, V.
- Gude, H., precision light absorption measurements with a prism mirror spectrometer and thermo-element, A., 427, 805.
- Gudmundsen, A., and Smith Corp., A. O., metallurgy of iron, (P.), B., 105.
- Guéhen, G., nuclear structure and artificial radioactivity, A., 142.
- Guedel, A. E., and Treweek, D. N., ether apnoea, A., 893.
- Güldenpfennig, F. See Holm, R.
- Gülich, and Sommer, use of brown-coal briquettes for gas production in bituminous-coal gasworks, B., 437.
- Guelin, A. See Weinberg, M.
- Guénault, B. M., and Wheeler, R. F., combination of hydrogen and oxygen in direct-current discharges, A., 176.
- Günther, E., detoxication of the horsetail, B., 699.
- Günther, G. See Euler, H. von, and Helfferich, B.
- Günther, P., and Meyer, R., heat of formation of azoimide, A., 1204.
- Günther, P. L., and Paneth, F. A., helium. XI. Spectro-analytical detection of traces of hydrogen and neon in helium, A., 1215.
- Günther-Schulze, A., ionic shell effect in gas discharges, A., 4.
and Betz, H., motion of ionic lattices of insulators at extreme field intensities, A., 147. Dielectric loss in electrolytic barrier layers at high field intensities to 10^7 volts per cm., A., 1447.
- Guercio, F., effect of injections of pregnancy urine on magnesium, calcium, and phosphorus of blood, A., 542.
and Ciulla, U., histochemical demonstration of gold, A., 1552.
See also Vercesi, C.
- Guérin, H., reduction of alkalino-earth arsenates by carbon; tribarium arsenate; reduction of alkaline-earth arsenates by carbon; tristrontium and tricalcium arsenates, A., 313, 714.
- Guéron, J., Raman spectrum, structure, and hydrolysis of solutions of stannic chloride, A., 34. Slow hydrolysis: constitution and progressive change of aqueous solutions of stannic chloride, A., 702.
and Prettre, M., complexity of the reaction between ozone and potassium iodide, A., 945.
- Guerrant, N. B., and Dutcher, R. A., effects of composition of diet on vitamin-B₁ and -B₂ requirements of the growing rat, A., 262.
- Dutcher, R. A., and Tomey, L. F., effect of type of carbohydrate on vitamin-B synthesis in the digestive tract of the rat, A., 1035.
See also Dutcher, R. A.
- Guerrini, G., combined action of monochromatic light and photodynamic substances on fermenting power of *Saccharomyces cerevisiae*, A., 534.
- Guertler, W., modern extension of the field of technical alloys by introduction of the rarer metals, B., 105.
- Kleweta, F., Claus, W., and Rickerken, E., comparative tests on electrolytic and fire-refined zinc-base alloys containing copper, aluminium, and manganese, B., 362.
and Landau, G., action of hydrogen sulphide on copper-lead-sulphur alloys, B., 500.
- Guest, G. M., and Holmes, F. E., pipette for storage of air-free reagents used in gasometric analysis, A., 1218.
and Leva, E., electric heater designed to prevent losses from creeping in evaporation of concentrated salt solutions preliminary to mineral analysis, A., 1217.
- Guest, M. E. See Guest, W. W.
- Guest, W. W., and Guest, M. E., yielding-jaw crushing machine, (P.), B., 578.
- Guggenheim, E. A., specific thermodynamic properties of aqueous solutions of strong electrolytes, A., 446.
- Guggenheim, M. See under Guggenheim Bros.
- Guggenheim, S. See under Guggenheim Bros.
- Guggenheim, S. R. See under Guggenheim Bros.
- Guggenheim Bros., sulphur condenser, (P.), B., 306. Recovery of elemental sulphur [from smelter gases], (P.), B., 306.
- Gleason, G. H., and Loonman, A. C., treating sewage, (P.), B., 480*.
See also Gleason, G. H.
- Gugger, P. H., Barentzen, W. E., and Comolite Corp., [mouldable] artificial wood composition, (P.), B., 1097.
- Gugler Lithographic Co. See Daub, G.
- Guha, A. C. See Krishnan, K. S.
- Guha, B. C., nomenclature of vitamin-B₂, A., 545. Interference of ascorbic acid in determination of adrenaline in the adrenal gland, A., 1283.
- Guha, B. C., and Biswas, H. G., renoflavin and vitamin-B₂, A., 545.
and Das, N., biological oxidation of inositol, A., 241.
and Ghosh, A. R., synthesis of ascorbic acid (vitamin-C) by means of tissues *in vitro*, A., 131. Vitamin-C in Indian food-stuffs, A., 262. Biological formation of ascorbic acid, A., 416, 903. Mannose dehydrogenase and ascorbic acid, A., 416.
See also Banerjee, K., Das, N., Ghosh, A. R., and Ghosh, B. N.
- Guha, P. C., and Ganapati, K., synthesis of pinonic acid, A., 975.
and Ramaswami, M. N., attempts to synthesise uric acid from nine-membered cycloids, A., 360.
and Ranganathan, S. K., 1:5-endo-methylene-cycloheptane-2:4-dione, A., 1245.
and Seshadriengar, N. K., action of trimethylene bromide on ethyl acetone-dicarboxylate: new synthesis of ethyl cyclohexane-2:6-dicarboxylate, A., 1497.
See also Hegde, B. J.
- Guichard, M., study of chemical systems by measurement of variation of weight with regularly variable temperature, A., 599.
- Guilbert, F., maturity and manufacturing value of [sugar] beets, B., 869. Horizontal or vertical crystallisation [of beet-sugar strikes], B., 1064.
- Guilbert, H. R., determination of carotene as a means of estimating vitamin-A value of forage, B., 78.
- Guild, R. See Canzanelli, A.
- Guilhon, J. See Guillot, G.
- Guillaume, A., and Adnot, (Mme.) J., analysis of black- and red-currant residues of domestic and industrial origin, B., 331.
- Guillaume, P., carbonisation of wood for obtaining a wood charcoal of high calorific value, (P.), B., 1033.
- Guillaumie, M., activation of pancreatic juice of the rabbit by enterokinase; rapid diminution at 30° of curdling power, A., 123. Development of rennin-like and proteolytic activity of trypsin-kinase, A., 252. Activity of extracts of pancreas of *Scyllium calulus* with added enterokinase, A., 252. Activation of trypsinogen by enterokinase, A., 660. Activation of pancreatic juice by calcium at different temperatures, A., 897.
See also Weinberg, M.
- Guillaumin, C. O., importance of technique in the study of protective enzymes of serum, A., 660. Determination of indoxyl, indigotin, indirubin, and the indoxyl-thymol complex of Jolles, A., 769.
and Merejkowsky, B., determination of bromine in blood and sera, A., 881.
- Guillemet, R., and Schell, C., rapid Kjeldahl determination of nitrogen and of total proteins in flour-mill products, B., 330. Fermentable non-reducing sugars of wheat flour, B., 425.
- Schell, C., and Le Fur, P., fermentable sugars, alcoholic, fermentation, and gas production during bread-making, B., 921.
- Guillemin, V., jun., molecular rays, A., 282.

- Guillemonat, A., oxidation of 1-ethyl- Δ^1 -cyclohexene and of β -methyl- Δ^2 -butene with selenium dioxide, A., 852.
- Guillery, R., hardness testing machine for metals, B., 501.
- Guillet, A., measurement of the moment of a couple by chronometric motor; application to viscosity, A., 467. Rotating sphero viscosimeter for liquids, A., 840.
- Guillet, L., modulus of elasticity [of metals], B., 501.
- Guillion, R., electrical birefringence of liquid oxygen and nitrogen, A., 917.
- Guillissen, J. See Union Chim. Belge Soc. Anon.
- Guillot, G., and Guilhon, J., cholesterolæmia in experimental infectious anæmia in the horse, A., 235.
- Guillot, J., effect of pigments on fluorescence of olive oil, B., 559. Effect of industrial treatment on ultra-violet absorption of vegetable oils, B., 559.
- See also Vizern, M.
- Guinzburg, M. See Goldstein, B.
- Guiseppina, M. See Ivo, U.
- Guitonneau, G., and Chevalier, R., calcium-phosphorus equilibrium in cheese, B., 77, 698.
- Keilling, J., and Lancelot, E., intensive use of starchy foods for dairy cattle, B., 476.
- Vargoz, J., and Deguy, (Mlle.) C., heat-resistant organisms in vegetable preserves. II, B., 331.
- Gukhman, L. A., treating oils with clay, B., 7.
- Gulanskaja, Z. See Nekrassov, N.
- Gulati, K. C., Seth, S. R., and Venkataraman, K., synthetical experiments in chromone group. XIII. Hydroxy-2-styrylchromones, A., 90.
- Gulbransen, E. A., and Robinson, A. L., integral heats of dilution, relative partial molal heat contents, and heat capacities of dilute aqueous sodium chloride solutions, A., 169.
- Gulbransen, R. See Browning, C. H.
- Guldager, A., correction of the chemical-physical equilibrium in bicarbonate-containing service water in hot-water plants, (P.), B., 611.
- Guldina, E. J. See Tschernichov, J. A.
- Guler, K., notched-bar impact strength of aviation, B., 771.
- Gulf Refining Co. See Gruse, W. A., McAfee, A. M., and Smith, Herschel G.
- Gulf States Steel Co. See Shannon, M. C.
- Guli, M. F. See Borshkovski, S. E., and Palladin, A. V.
- Gulinov, L. G. See Budnikov, P. P.
- Gull, H. C., measurement of small volumes of nitrogen obtained by micro-Dumas method, A., 948.
- Gulland, J. M., and Lucas, N. S., oxytocic hormone of the posterior lobe of the pituitary gland. VII. Ultra-violet absorption spectra, A., 1424.
- and Mead, T. H., equilibria between amino-acids and aromatic aldehydes. I, A., 491. Correlation of the spermidic efficiencies of aromatic aldehydes with their chemical reactivities, and electrometric alkaline titrations of gelatin in presence of aromatic aldehydes, A., 526.
- and Morris, C. J. O. R., canavanine, A., 966.
- Gulland, J. M., and Randall, S. S., oxytocic hormone of the posterior lobe of the pituitary gland. V. Recognition as an oxidation-reduction system. VI. Action of oxidising and reducing agents, A., 542.
- See also Freeman, M.
- Gullans, O. See Spector, B. K.
- Gullette, W. S., and Sinclair Refining Co., cracking of hydrocarbons, (P.), B., 56, 892.
- Gullich, K. See Bisonit Ges.m.b.H.
- Gullickson, T. W. See Wallis, G. C.
- Gulwell, T. See Jones, W. J.
- Gummert, H. See Maurer, E.
- Gunderson, M. F., and Skinner, C. E., production of vitamins by a pure culture of *Chlorococcum* grown in darkness on a synthetic medium, A., 260.
- Gundlach, E. See Griem, W. B.
- Gundy, G. V., and Raiford, L. C., condensation of vanillin substitution products with acetophenone, A., 214.
- Gunjkar, L. K. See Dastur, R. H.
- Gunn, D. L., oxygen consumption of the cockroach in relation to moulting, A., 652.
- Gunn, G., preparation of a composition for preservation of wood, timber, etc., (P.), B., 632.
- Gunn, G. H., sewage-disposal plant, (P.), B., 176.
- Gunn, J. W. C., and Sapeika, N., assay of *Strophanthus*; mortality curve for *Xenopus laevis*, A., 527.
- Gunther, H., feeding-trials with swedes as substitutes for oats for working horses, B., 282.
- Guntsch, A., ultra-violet band spectrum of magnesium hydride and magnesium deuteride, A., 427. Calculation of band constants for the second positive nitrogen group, A., 675.
- Guntz, A. A., and Beltran, E., influence of hydrogen ions in the phenomena of reduction and hydrogenation, A., 1088.
- Gupta, A. K. D. See Khastgir, S. R.
- Gupta, A. K. S., rotational analysis of the ultra-violet bands of phosphorus monoxide, A., 561.
- See also Sen, M. K.
- Gupta, G. N. See Sen, H. D.
- Gupta, I. C. See Verma, M. R.
- Gupta, J. See Rây, P.
- Gupta, M. M. S., Mohanty, H., and Sharan, S., magneto-resistance change of nickel studied with alternating current, A., 567.
- Gupta, M. P., and Dutt, S., dyes derived from acridic acid, A., 1506.
- Gurd, M. R., effect of oxytocin and vasopressin on the action of insulin, A., 543.
- Use of grain-fed pigeons in the biological assay of liver preparations, A., 774.
- Gurevitsch, A., sulphite-cellulose extract as a mordant improving drum-dyeing [of leather], B., 401. Rapid permanganate method for determining chromium in chrome extracts and chromo liquors, B., 819.
- Gurevitsch, H. See Orékhov, A.
- Gurevitsch, I., spontaneous emission of neutrons by radio-elements, A., 802.
- Gurevitsch, L. E., modern theory of metals, A., 1452.
- Gurevitsch, L. M. See Sokolovski, A. A.
- Gurevitsch, Z. B., and Tschirvinskaja, E. J., catalytic oxidation of methyl alcohol to formaldehyde, B., 442.
- Gurin, S., and Clarke, H. T., allocation of free amino-groups in proteins and peptides, A., 101.
- See also Clarke, H. T.
- Gurjanova, E. N. See Monoszon, A. M.
- Gurmendi, G., chemical analysis and biological test of commercial arsenobenzones, B., 1023.
- Gurney, E. H., report of the [Queensland] Agricultural Chemist, B., 1158.
- Gurney, R. W., theory of electrical double layers in adsorbed films, A., 578.
- Gurova, V. See Bolotnikov, V.
- Gurvich, V. L., refining oils from the Pongu-Gurvich process, B., 7. Dewaxing oils obtained in the Pongu-Gurvich plant, B., 7.
- Gurvitsch, A., mitogenetic radiation, A., 400.
- Gurvitsch, M. N., Tschilkov, J. I., and Speranskaja, M. A., preparation of sulphuric acid from sulphates and carboniferous pyrites, B., 20.
- Gurvitz, S. S. See Jofnova-Goldfein, E. M.
- Gusev, N. N., and Neuman, M. B., rate of combustion of pentane[+oxygen] mixtures, A., 1081.
- Guseva, M. S. See Pogodin, S. A.
- Guseva, M. V. See Turova, M. B.
- Gusjatzkaja, E. V. See Liutin, L. V.
- Guskov, V. A., physical and chemical action of zinc chloride solutions on coal in float-and-sink tests, B., 436.
- Gustafsson, Y. See Mattson, S.
- Gustafson, A. F., composition of black locust leaf mould and leaves: effect of the black locust, B., 646.
- Gustafson, F. See Myers, C. N.
- Gustafson, H. See Behrman, A. S.
- Gustavson, R. G. See D'Amour, F. E.
- Gustin, A., and Continental Paper & Bag Corp., pulp manufacture, (P.), B., 351.
- Gustus, E. L. See Meyer, R. K.
- Gutehoffnungshütte Oberhausen Akt.-Ges., cracking of hydrocarbons, (P.), B., 260.
- Centrifuges, (P.), B., 787. Formaldehyde from methane, (P.), B., 939. [Discharge nozzles for] centrifugal drums, (P.), B., 1027. Splitting and hydrogenation of hydrocarbon oils, (P.), B., 1126.
- Gutenberg, B., age of the earth from changes in temperature and elastic properties, A., 1099.
- Guterman, C. E. F., control of aster-leaf rust, B., 568.
- and Massey, L. M., liquid formaldehyde treatment to control damping-off of flower seedlings, B., 567.
- Guth, E., and Mark, H., intramolecular statistics, especially for chain molecules. I, A., 150.
- Guthe, T., methylene-blue reduction by *B. tuberculosis* R and S, A., 1028.
- Guthmann, H., and Böhme, L., glycogen of the placenta, A., 1004.
- See also Baukloh, W.
- Guthmann, K. See Euler, H.
- Guthrie, E. S., Vogt method of manufacturing flake buttermilk, B., 571.
- Gutiria, V. S., increment in the parachor of hydrocarbon molecules with abnormal intramolecular strains, A., 570.
- Gutman, C., and Dalsace, J., state of combination of the gonadotropic hormone in blood-serum, A., 667.
- Gutman, S. M., Rehbindler, P. A., Schulwas, M. D., Lipetz, M. E., and Rimszkaja, M. M., physico-chemical colloidal method for separation of carbide from the slag from steel, B., 548.
- Gutmann, A., yield curves with two variable growth factors, B., 37.

- Gutmann, J. See Tiffeneau, M.
 Gutner, R. See Tischtchenko, D. V.
 Gutschmidt, H., oligodynamic treatment of drinking water by various "katadyn" processes, B., 256. Bacteriological and thermal basis for preparation of preserved meat at various temperatures, B., 652.
 Guttman, A., concrete from granular blast-furnace slag, B., 547.
 and Wenzel, F., impact-resistance of concrete, B., 592.
 Gutzzeit, C. W. See Keen, W. H.
 Gutziya, V. S. See Dalin, M. A.
 Gutzait, A. M. See Ivanov, K. I., and Tschernoshukov, N. I.
 Gutzzeit, G., and Galopin, P., chemical differentiation of related sulpho-salts in a polished surface by the contact method, A., 463.
 Weibel, R., and Duckert, R., specific reaction for antimony cations, A., 464. See also Wenger, P.
 Gutzvich, G. K. See Murri, I. K.
 Guy, H. L., and Assoc. Electrical Industries, tubular surface apparatus for effecting heat exchange between liquids, (P.), B., 754.
 Guy, T. W. See Kassel, L. S.
 Guye, C. E., properties of layers of molecular dipoles, A., 430. Propagation of imbibition. I and II, A., 581. Borders of physics and biology, A., 651. Special cases of propagation of capillary action, A., 1458.
 Guyer, A., and Bieler, A., preparation of alkali nitrates from alkali chlorides, (P.), B., 226.
 Bieler, A., and Schmid, E., solubility of chlorides and nitrates of alkali metals in ammonia-water mixtures, A., 26. Interaction of alkali chlorides with calcium nitrate in liquid ammonia, A., 178. and Schütze, H., polymerisation of vinyl bromide, A., 175.
 Guyer, J. A., and Phillips Petroleum Co., treatment of hydrocarbons to produce carbon black, (P.), B., 9.
 Guyot, O. See Pummerer, R.
 Guyot, R., viscous fermentation of lemonades [in pharmaceutical preparations], B., 572.
 Guzeli, L., influence of acid in potentiometric chloride titration, A., 835.
 Guzev, V. K. See Budnikov, P. P.
 Guzmán, J., and García, G., electro-analysis and macro-electro-analysis of nickel with iron electrodes, A., 597.
 and Quintero, L., electro-analysis of silver with three electrodes, A., 949.
 and Rancaño, A., "depolarimetry" by thermo-electricity, A., 948.
 and Sarabia, A., electro-analysis with three electrodes, A., 723.
 Guzzoni, G., magnesium-aluminium-nickel alloys, B., 808.
 Gvozdozer, S. D., liberation of electrons from molybdenum surfaces by positive mercury ions, A., 1047. Ratio between electronic and ionic current on a glow cathode which is subjected to a discharge in mercury vapour, A., 1293.
 Gwatkin, R., fractions of *Brucella abortus*. I. Preparation, toxicity, and nature of alcoholic precipitate. II. Complement fixation and intradermal tests. III. Immunity experiments, A., 664.
 Gwinn, C. D. See Sporing, P. A.
 Gwyn, C. B., jun., and Mallory & Co., Inc., P. R., electrical make-and-break [tungsten] contacts, (P.), B., 682.
 Gye, W. E. See Ledingham, J. C. G.
 Gyles, T. B. See Nat. Processes, Ltd.
 György, P., vitamin-B₂ complex. I. Differentiation of lactoflavin and the "rat antipellagra" factor. II. Distribution of lactoflavin and of the "pellagra-preventing factor" (vitamin-B₂) in natural products of animal origin. III. Inactivation of lactoflavin and vitamin-B₂ by visible light, A., 545. Growth-promoting action of synthetic flavins, A., 1175.
 See also Ray, S. N.
 Györki, J., bitumen-rich coal of Szápár, B., 436.
 Gyoku, H., mechanism of morphine hyperglycaemia. I. Influence of opium alkaloids on respiratory movements in rabbits. II. Action of opium alkaloids on the total carbon dioxide and alkali reserve in blood-plasma of rabbits. III. Influence of opium alkaloids on adrenaline content of blood in normal rabbits. IV. Influence on blood-sugar and plasma alkali reserve of rabbits, A., 528, 1410. Hyperglycaemic action of opium alkaloids, A., 1156.
 Gypsum, Lime & Alabastine, Canada, Ltd., wallboard, (P.), B., 676.
 See also Haire, H. J., and Parfitt, A. W.
 Gyro Process Co. See Spiehler, A. F.
 Gysen, F., influence of cuprous oxide on welding of red copper, B., 770.
 Gysin, M., copper minerals of Kinsenda (Belgian Congo). I. Bornite-chalcocopyrite associations. II. Presence of two varieties of chalcocite. III. Presence of a hypogene covellite and a supergene covellite, A., 842, 1478.
 Gyulai, Z., electrical conductivity of deformed NaCl crystals and their crystalline structure, A., 1303.
- ### H.
- Haack, D., and Schmidt, R., [gas- and fire-proof] sheeted material, (P.), B., 1041.
 Haag, H. B., and Woodley, J. D., effect of caffeine and theobromine on digitalis toxicity, A., 780.
 Haag, J. R., and Jones, I. R., calcium and inorganic phosphorus content of blood-plasma of normal dairy cattle, A., 1143.
 See also Jones, I. R.
 Haalebos, M. G. A. See Bruckman, H. W. L.
 Haantjes, J. See Keesom, W. H.
 Haarbuerger, K., artificial leather, (P.), B., 265.
 Haarer, E. See Fischer, Hans.
 Haarmann, W., lactic acid in irradiated and non-irradiated tumours, A., 1526.
 Haas, A. R. C., relation between chemical composition of citrus-scale insects and their resistance to hydrocyanic acid fumigation, B., 168. Growth response of [citrus] tree tops relative to soil treatments, B., 1158.
 and Bliss, D. E., growth and composition of Deglet Noor dates in relation to water injury, A., 1547.
 and Klotz, L. J., physiological gradients in citrus fruits, A., 1547.
 and Quayle, H. J., copper content of citrus leaves and fruit in relation to exanthema and fumigation injury, B., 1110.
 Haas, E. See Ardenne, M. von.
 Haas, F. See Kapeller-Adler, R.
 Haas, G. R. See Bunte, K.
 Haas, L. W., Bohn, R. M., and Short Milling Co., J. R., bleaching agent for flour and its utilisation in making bread, (P.), B., 286.
 and Short Milling Co., J. R., bleaching agent and preparation of bleached bread dough, (P.), B., 286. Bleaching agent for flour dough and preparation of bleached dough for white bread, (P.), B., 286. Bleaching of flour, (P.), B., 286.
 See also Short Milling Co., J. R.
 Haas, O. See Frenzel, C.
 Haas, P., liberation of methyl sulphide by seaweed, A., 1042.
 Hill, T. G., and Karstens, W. K. H., metabolism of calcareous algae. II. Seasonal variation in certain metabolic products of *Corallina squamata*, Ellis, A., 1178.
 and Russell-Wells, B., phosphorus content of marine algae, A., 1179.
 Haas, W. See Ulzer, P.
 Haase, E. See Abderhalden, E.
 Haase, H., chrome yellow on a strontium basis, B., 239.
 Haase, T., absorption of decimetre waves in ionised gases, and the problem of the demonstration of the absorption of longer waves by excited hydrogen atoms, A., 1304.
 Habenicht, W., effect of an electric current on a protein cylinder according to Bois-Reymond, A., 707.
 Haber, E. S., and Swanson, P. P., effect of nutritive state on the quantity of vitamin-A present in leaves of *Coleus blumei*, A., 1431.
 Haber, F., and Weiss, J., catalytic decomposition of hydrogen peroxide by iron salts, A., 174.
 Haber, P. See Hornus, G.
 Haberland-Schwarz, M. See Cartwright, C. H.
 Haberl, K., fluorescence of cyclohexane, A., 11. Intensity determinations with Raman lines, A., 11. Apparatus for converting photograms into intensity curves, A., 320.
 Haberland, H. W. See Fischer, H.
 Haberlandt, H., fluorescence analysis of minerals, A., 186.
 and Schiener, A., colour distribution in fluorite in relation to crystal structure, A., 915.
 Habla, A., brick and tile kilns, (P.), B., 454.
 Hachihama, Y., and Saegusa, Hachiro, bagasse. V. General properties of bagasse lignin. VI. Methyl and acetyl derivatives of bagasse lignin, A., 1239; B., 184.
 Saegusa, Hachiro, and Takemura, W., bagasse. VII. Comparison of bagasse and wood lignins, B., 1039.
 and Shinra, K., bagasse. IV. Isolation of lignin by action of alcohol, B., 264.
 Hackel, J., and Urbański, T., explosive properties of starch nitrates, B., 175. Preparation and properties of starch nitrates. III. Explosive properties, B., 607.
 Hackel, W., saturation effect of dielectric constants of solutions of electrolytes, A., 699.
 Hacker, W., application of Kohlrausch-Weber theory of moving boundary in mixed electrolytes and colloid solutions, A., 445.

- Hackl, A. See Lieser, T.
 Hadaček, J. See Petru, F.
 Haddon, A. J. H. See Whitehouse, J. M.
 Haddock, A. L., determination of traces of thallium in presence of other metals, A., 950.
 Haddock, L. A., viscosity of tragacanth mucilages, B., 253.
 Haddock, N. H. See Imperial Chem. Industries.
 Haddon, C. L. See Gotham Co., Ltd.
 Haddon, E., determination of sugar in bagasse, B., 328. Baryta clarification method [in double polarisation method of determining sucrose], B., 519.
 Hadert, H., hardening of resins, B., 33. Aniline inks for offset printing, B., 366.
 Hadfield, H. F., manufacturing qualities of P.O.J. 2878 [sugar cane], B., 75.
 Hadfield, (Sir) R., special steels, B., 594.
 Hadjopoulos, J. G., and Bierman, W., effects of hyperpyrexia induced by physical means on complement-fixing antibodies, A., 1395.
 Hadler, B. C. See Dow Chem. Co.
 Hadley, D. J. See Dunlop Rubber Co.
 Hadlock, C. See Beattie, J. A.
 Hadwiger, H., determination of fineness of grinding of enamel, B., 630.
 Häfner, H., detection and control of diacetyl in fats, B., 858.
 Haegeler, R. W., control of destructive prune worm, B., 248.
 Hägg, G., powder diagram of a new iron carbide, A., 17. The vitreous state, A., 285, 918. Spinels and cubic sodium-tungsten bronzes as new examples of structures with vacant lattice points, A., 813. Crystal structure of magnetic ferric oxide, $\gamma\text{-Fe}_2\text{O}_3$, A., 920. Cubic sodium-tungsten bronzes, A., 1065. Röntgenographic investigations of formation and decomposition of martensite, B., 457.
 and Söderholm, G., crystal structures of magnesium-aluminium spinels with alumina in excess and of γ -alumina, A., 920.
 Hägglund, E., influence of origin of wood on yield and quality of its sulphite and sulphate pulp, B., 446. Change in fibre structure in sulphite- and sulphate-cellulose cookings, B., 764.
 and Geijer, E., digestion of sulphite pulp with recovered liquor, B., 299.
 and Johnson, T., sulphonation of pine-wood lignin. XXVII. Chemistry of sulphite-cellulose cooking, B., 490.
 and Nihlén, H., importance of high lime content of cooking acid in sulphite-pulp cooking, B., 490. Sugar formation and decomposition in sulphite-pulp cooking process, B., 778.
 Sandelin, O., Nyman, C., Eriksson, T., and Koskull, H. von, influence of wood quality on yield and quality of sulphite and sulphate cell material, B., 408.
 Haehn, H., chemical processes in alcoholic fermentation, B., 650.
 and Leopold, H., influence of antiseptics on yeast autolysis, A., 124. Acid production in autolysis of yeast. II. Hydrolysis of nucleic acid, A., 1280.
 Hähnle, S., colorimetric determination of p_{H} with the Pulfrich photometer. I., A., 182. Volumetric determination of carbonyl compounds. I. Review of literature, A., 1390.
 and Holmberg, B., combined indicators, A., 462.
 Haehnel, W. See Eibner, A., and Herrmann, W. O.
 Hällström, M. af, solvation and equation of state of dissolved substances, A., 1076. Micro-determination of mol. wt., A., 1476.
 Hämmerle, W. See Mohler, H.
 Haenel, E. See Lottermoser, A.
 Hänlein, W., and Thomas, M., aggregation and transformation points of glasses from measurements of electrical resistance, B., 544.
 Haenny, C., thermal variation of magnetic birefringence of paramagnetic solutions of rare-earth salts, A., 149. Magnetic birefringence of cerous salts in solution, A., 295.
 and Dupouy, G., paramagnetic properties of cerous salts in solution, A., 14.
 Hänsel, G., and Grevel, A., anodic behaviour of tin in electrolysis in sodium stannate solution, A., 942. Electrodeposition of noble-metal alloys, B., 730.
 Haenseler, C. M., beneficial fungi, A., 786. Control of dewberry anthracnose by spraying, B., 247.
 Härdtl, H., enrichment of volatile colouring matters from rubber-ware in paper and wood, B., 512. Reddening of rye by acids; examination of milling- and seed-corn and milling products, B., 746. Microscopy of cereal seed-coats, B., 780.
 Härting, H. See Traube, W.
 Häusler, H., and Schnetz, H., inhibition of blood-clotting by metals *in vitro*, A., 375. Inhibition of adrenaline glycoconolysis in frog's liver by metals, A., 410.
 Haeuszler, H. See Rabe, P.
 Haistad, L. R., and Tuve, M. A., carbon radioactivity and other resonance transmutations by protons, A., 1297.
 See also Tuve, M. A.
 Hagedorn, A. See Tschesche, R.
 Hagen, J. See Euler, H. von.
 Hager, ensilage of green fodder with the use of acid, B., 922.
 Haggard, H. W., and Greenberg, L. A., absorption, distribution, and elimination of ethyl alcohol. I. Determination in air, blood, and urine by iodine pentoxide. II. Excretion in urine and expired air: distribution between air and water, blood, and urine. III. Rate of oxidation in the body, A., 116.
 Hagisawa, H. See Ishikawa, F.
 Hagiya, M. See Imai, H.
 Haglund, P., precision measurements of the $K_{\alpha_1, 2}$ doublets of the lighter elements, A., 676.
 Haglund, T. R., products containing spinels, (P.), B., 147. Chromium or its alloys, (P.), B., 362. Alloyed iron and steel, (P.), B., 461. Refining of [chromium] alloys, (P.), B., 557.
 Hague, E. N. See Dunstan, A. E.
 Hague, R. A., textile uses of urea and thiourea, B., 846.
 Hahn, A., Niemer, H., and Freytag, B., degradation of lactic acid by yeast enzymes. IV., A., 661. Influence of yellow respiratory enzyme on dehydrogenation of lactacidogen and hexosediphosphoric acid by yeast-dehydrogenase, A., 1161.
 Hahn, C., and Internat. Precipitation Co., apparatus for electrical treatment of fluids, (P.), B., 813. Supplying and cleaning gas by electrical action, (P.), B., 858.
 See also Koppers Co. of Delaware.
 Hahn, C. A., and Nielsen, H., refining benzol and hydrocarbons, B., 484.
 Hahn, F. L., reactions in iodometric determination of chromates, A., 721. Determination of minute amounts of bromide in presence of very great excess of chloride, A., 835. Determination of small quantities of ethyl bromide in biological systems, A., 1182.
 Hahn, G., Bärwald, L., Schales, O., and Werner, Heinrich, synthesis of tetrahydroharman derivatives under physiological conditions. II., A., 1388.
 and Leopold, W., action of dicyanogen on phenols, A., 1491.
 and Ludewig, H., synthesis of tetrahydroharman derivatives under physiological conditions. I., A., 224.
 and Schales, O., auto-condensations of methylglyoxal. I. Humic acids from three-carbon systems, A., 67. β -Hydroxyphenylethylamines and their transformations. III. Synthesis of benzylisoquinolines under physiological conditions, A., 357. [Simplification of Pictet's nicotine synthesis], A., 1136.
 and Werner, Heinrich, synthesis of tetrahydroharman derivatives under physiological conditions. III. Synthesis of the yohimbine skeleton, A., 1388.
 Hahn, O., application of radioactive methods in chemistry, A., 6. Chemical elements and natural atomic types from the viewpoint of investigation of isotopes, A., 274. [Preparation of protoactinium], A., 593.
 and Born, H. J., radium in north- and middle-German deep waters, A., 1477.
 and Meitner, L., artificial transformation of uranium by neutrons. I and II., A., 278, 678. Artificial transformation of thorium by neutrons; production of the missing $4n+1$ radioactive series, A., 911.
 Meitner, L., and Strassmann, F., artificial transformation products of uranium, A., 1050.
 and Sentner, F., surface studies on ferric oxide by the emanation method, A., 32.
 Haid, A., Becker, F., and Dittmar, P., chemical stability of explosives, B., 607.
 Haider, C., control method for sulphite [-pulp] cooking, B., 1136.
 Haidrich, K., photographic record of resonance line of helium, A., 1437.
 Haiduk, H. See Suhrmann, R.
 Haigh, B. P., lower yield point in mild steel, B., 27. Fatigue in structural steel, B., 191.
 Haigh, C. D., use of *Aspergillus niger* in testing potash availability [of mixed fertilisers], B., 741.
 Hailwood, E. A., kilns for manufacture of glassware and other purposes, (P.), B., 385.
 Haines, C. W., [apple] syrup, (P.), B., 694.
 Haines, E. C. See Norris, J. F.
 Haines, F. M., transpiration and pressure deficit. I., A., 794.
 Haines, G. H., and Grain Machinery Co., mixing apparatus, (P.), B., 387.
 Haines, W. H., essential oil industry of Seychelles, B., 524.
 Haire, H. J., Reynolds, J. D., and Gypsum Lime & Alabastine, Canada, Ltd., cold-water plastic paint for textured wall decoration, (P.), B., 110.
 Hairs, E. See Brull, L.

- Haissinsky, M., electrolysis of extremely dilute solutions; normal potentials of bismuth and polonium, A., 169, 585. Deposition of artificial radio-elements by electrochemical exchange, A., 1088.
- Hait, E. See Schorigin, P. P.
- Haiteger, M., application of fluorescence analysis in micro-chemistry, A., 315.
- Hajna, A. A., decomposition of salts of organic acids by bacteria of the genus *Salmonella*, A., 899.
- Hakomori, S., and Oka, Y., synthetic phosphors. I. External photo-electric effect in the ultra-violet region and distribution of excitation of various alkaline-earth phosphors, A., 282.
- Halais, P. See Craig, N.
- Halbach, H. See Fischer, Hans.
- Halbach, H. L. See N. V. Hollandsche Maats. voor de Vervaardiging van Glas.
- Halbach, K., hydraulic cements or binding agents and working up of same in street and road construction, (P.), B., 675.
- Halban, H. von, and Eisner, H., kinetics of rapid reactions. I., A., 1082.
- and Kortüm, G., dissociation constants of weak and moderately strong electrolytes. I. Dissociation constant of 2:4-dinitrophenol, and range of validity of Debye-Hückel limiting formula, A., 34.
- Kortüm, G., and Seiler, M., dissociation constants of weak and moderately strong electrolytes. II. Dissociation constant and solubility of 2:4-dinitrophenol in salt solutions, A., 1203.
- See also Kortüm, G.
- Halban, H. von, jun. See Curie, (Mme.) I.
- Halbertsma, K. T. A., effect of menformone on eye-pressure, A., 667.
- Haldane, J. S., and Makgill, R. H., spontaneous oxidation of coal and other organic substances, B., 52.
- Haldeman, K. O., and Moore, J. M., influence of a local excess of calcium and phosphorus on healing of fractures, A., 651.
- Haldeman, W. S. See Hale, W. J.
- Halden, W., ergosterol and fat increase in brewer's yeast, A., 661.
- See also Sobotka, M.
- Halden & Co., Ltd., J., and Holden, J., sensitised photographic printing [blue-print] paper and cloths, (P.), B., 46. Developers and intensifiers for ferroprussiate or blue prints, (P.), B., 175. Treatment of papers and fabrics for use in photographic printing, (P.), B., 185. Papers and cloths for photographic printing, (P.), B., 479. Light-sensitive papers and cloths, (P.), B., 479. Treatment of paper and cloth, (P.), B., 625. Photo-printing papers, (P.), B., 1119.
- Hale, F. E., pipe-corrosion experiments, Catskill supply, New York City, B., 27. Effect of excess lime hydrate [calcium hydroxide] on corrosive soft water, B., 1072.
- Hale, G. C., propellant powder, (P.), B., 383.
- Hale, J., determination of variability of pulp wood as indication of pulp yield, B., 399.
- Hale, P. P., chromium plating of type [metal], (P.), B., 811.
- Hale, W. J., and Haldeman, W. S., cyclic oxidation of alcohols to aliphatic acids, (P.), B., 138.
- and Streets, H., manufacture of organic acids from aldehydes and primary alcohols, (P.), B., 619.
- Hale, W. S. See Balls, A. K.
- Hales, J. S., and Moss, W. C., gas-sp. gr. balance, A., 1343.
- Hales, R. A. See Sanders, M. T.
- Halford, J. O., Anderson, L. C., Bates, J. R., and Swisher, R. D., exchange reaction between acetone and deuterium oxide; kinetics and equilibrium, A., 1328.
- See also Bates, J. R.
- Halik, J. See Glazunov, A.
- Hall, A. H., and Dickson, T. G., cold withering [of tea], B., 78.
- Hall, A. J., dyeworks effluent purification, B., 128. Vat dyeing of [cotton] crêpon [fabrics], B., 897. Oxycellulose in cotton fabric bleached for dyeing; two methods by which its "dye resist" can be obviated, B., 1139.
- Hall, B. V., reactions of rat and mouse ova to hydrogen ions, A., 1414.
- Hall, C. C., hydrogenation-cracking of condensed nuclear hydrocarbons, B., 791.
- See also Cawley, C. M.
- Hall, E., Goertemiller, K. H., and Procter & Gamble Co., [fats for] shortening, (P.), B., 365.
- Hall, E. L., and United Gas Improvement Co., oil gas and water-gas, (P.), B., 260. One-shell gas-manufacturing set with marginal blast, (P.), B., 485.
- Hall, F. C. See Nash, A. W.
- Hall, F. G., haemoglobin function in the developing chick, A., 878.
- See also Barcroft, J.
- Hall, F. W. See Texas Co.
- Hall, G. A., heavy kraft paper for corrugated board boxes, B., 400.
- Hall, G. F., and Powell, A. D., analysis of acriflavine B.P. and neutral acriflavine, B., 253.
- See also Coulthard, C. E., and Ellison, L. R.
- Hall, H. C., [aluminium] alloy for bearings [of high-speed internal-combustion engines], (P.), B., 557. Heat treatment of aluminium alloys, (P.), B., 909.
- and Rolls Royce, Ltd., aluminium alloy, (P.), B., 557, 1099.
- Hall, H. E., solvent manufacture from fermentation [of carbohydrate], (P.), B., 696.
- Hall, J. A., and Gisvold, O., slash-pine (*Pinus caribaea*, Morelet). I. Fatty constituents of the phloem, A., 864.
- See also Gerry, E.
- Hall, J. H. See Hall & Kay, Ltd.
- Hall, J. L. See Conrad, R. M.
- Hall, M. See Adams, J.
- Hall, R. E., and Hall Labs., Inc., water softening and washing, (P.), B., 3. Treatment of steam-boiler feed water, (P.), B., 386.
- See also Hall Labs., Inc.
- Hall, R. O., spontaneous super-contraction of animal hair, A., 1144. Fibre forms in animal hairs, A., 1396.
- Hall, Robert O., and Ontario Research Foundation, apparatus for testing fastness to light of dyes, inks, and other colour materials, (P.), B., 533.
- Hall, R. P. See Loefer, J. B.
- Hall, S. A. See Webb, B. H.
- Hall, T. E., and Procter & Gamble Co., spray-drying of soap, (P.), B., 1102.
- Hall, W., temperature- or pressure-control apparatus, (P.), B., 657.
- Hall, W. H., and Johnston, H. L., concentration of heavier isotopes of oxygen in commercial electrolytic cells, A., 1330.
- Hall, W. J., artificial silk yarns, etc., (P.), B., 798.
- Hall, W. T., and Woodward, R. B., precipitation of barium in copper-tin group of qualitative analysis, A., 54.
- Hall & Kay, Ltd., Kay, P., and Hall, J. H., filters, etc., for removing suspended matters from air or other gases, (P.), B., 978.
- Hall Laboratories, Inc., and Hall, R. E., water softening, (P.), B., 482. Washing or laundering processes and compositions therefor, (P.), B., 492. Solution of deposits of alkaline-earth compounds, (P.), B., 494.
- See also Hall, R. E.
- Hall Tobacco Chemical Co., reducing nicotine content of tobacco, (P.), B., 878.
- See also Gross, P. M.
- Halla, F., and Nowotny, H., anode temperature and emission of X-rays, A., 3.
- and Tompa, H., condition of sodium dissolved in fused sodium hydroxide, A., 166.
- Hallam, C. D., and Cox, R. S., mushroom dot in half-tone etching, B., 575. Comparative tests of etching methods, B., 575.
- Hallam, H., and Southwell, R. V., impact testing [of metals], B., 192.
- See also Transparent Paper, Ltd.
- Hallaer, C., behaviour of bacteria and infectious lysis in the ultra-violet spectrum, A., 1030.
- Halle, F., X-ray analysis of organic gels, A., 162.
- Halle, R., conversion of plant substances into fossil coals, B., 1122.
- Haller, H. L., and Acree, F., jun., constituents of pyrethrum flowers; determination of pyrethrin-II, B., 1068.
- and LaForge, F. B., rotenone. XXX. Non-crystalline constituents of derris root, A., 92.
- See also Campbell, F. L., and LaForge, F. B.
- Haller, R., existence of transverse subdivision of vegetable fibres, B., 844.
- Hallett, L. T., thermal- and sound-insulating material, (P.), B., 150*.
- Halliday, E. C. See Ho, P. C.
- Halliday, G. E., and Kraybill, H. R., measuring the colour of soya-bean oil, B., 463.
- Hallman, L. See Butts, J. S.
- Hallo, J. H., and Gevaert Photo-Producten, N. V., [incised] photographic and cinematographic films, (P.), B., 255.
- Halloran, C. P. See Trout, C. M.
- Halloran, H. G., [liquid] insoluble cement [adhesive], (P.), B., 115*.
- Hallowes, A. P. C. See Alkins, W. E.
- Halls, E. E., analytical control of "soluble" cutting oils, B., 31. Determination of stoving temperature in enamelling plants, B., 33.
- Halmos, C. See Polgár, A.
- Halowax Corporation. See Brown, S.
- Halperin, F. See Blochinzev, D.
- Halpern, A. C., cytological responses of rat thyroid to treatment with anterior pituitary and potassium iodide, A., 1423.
- Halpern, N., and Cortegiani, E., destruction of acetylcholine by various organs of the guinea-pig, frog, and snail, A., 1163.
- Halpern, O., dissociation constants of acids in light and heavy water, A., 1203.
- and Gross, P., electrolytic separation of hydrogen isotopes, A., 1210.

- Halpern, O., and Heller, G., Dirac electron in a gravitational field, A., 1298.
See also Gross, P.
- Halpin, J. G. See Kline, B. B., and Knowles, H. R.
- Halprin, H., pancreas as a blood regulator, A., 666.
- Halsey, J. T., effect of barbiturates and morphine, A., 893.
- Halström, P., determination of strychnine and quinine in mixed alkaloids; study of method used in the Danish Pharmacopoeia for determination of strychnine and quinine in Easton tablets, B., 924.
- Halvorson, H. O., Bayliss, M., Ordal, E. J., and Wilson, J. L., germicidal detergents. III., B., 976.
See also Bayliss, M., and Cade, A. R.
- Ham, A. W., and Lewis, M. D., hypervitaminosis-D rickets: action of vitamin-D, A., 418.
- Hamáček, J. See Prát, S.
- Hamada, H., bands at 4450 and 4180 Å. in spectra of the night sky and of the aurora, A., 138.
- Hamai, S., reactions between ethylene chloride and chlorine, A., 325. Absorption of hydrogen chloride into various organic liquids and calculation of the heat of absorption. I and II., A., 441, 1067. Study of substitution and decomposition reactions by means of photoelectric cells. I. Absorption of light of wave-lengths 3650 and 4360 Å. by vapours of various halogen derivatives of ethane, A., 563.
- Hamamura, E. K. See Hance, F. E.
- Hamamura, Y., constitution of polyhydroxycyclohexane. I. 1-Tetrahydroxymannocyclitol, A., 194.
- Hamano, S., purification of biosterol (vitamin-A) and a crystalline derivative thereof, A., 260. Purification of biosterol (vitamin-A) and its crystalline derivatives, A., 414. Crystalline derivative of vitamin-A, A., 543. Physiologically active crystalline esters of vitamin-A, A., 1545.
- Hamblen, E. C., preoperative administration of an extract of pregnancy urine: a study of the ovaries and of the endometria in hyperplasia of the endometrium following such administrations, A., 1425.
- Hamblet, C. See Moureu, H., and Schumb, W. C.
- Hamburg, H. See Koller, G.
- Hamburg, M. See Jalowetz, E.
- Hamburger, C., gonadotropic hormone in the pregnant mare (pituitary or placental origin), A., 128.
- Hamel, J., Chavarot, M., and Aubry, P., adult blood after eleven years on egg and milk diet, A., 999.
- Hamence, J. H., detection of nitrates in milk, B., 1019.
- Hamer, (Miss) F. M., neocyanine, A., 992.
See also Fisher, (Miss) N. I., and Kodak, Ltd.
- Hamer, P., rapid volumetric determination of sulphate in natural water and boiler blowdown using potassium palmitate, B., 880.
See also Clark, L. M.
- Hamer, W. J., potential of the lead dioxide-lead sulphate electrode at various temperatures, A., 305. Temperature variation in transference numbers of concentrated solutions of sulphuric acid as determined by the galvanic cell method, A., 705.
- Hamer, W. J. See also Harned, H. S., and Scatchard, G.
- Hamid, M. A., Singh, G., and Dunncliff, H. B., action of hydrogen sulphide on chromates of hydrogen, ammonium, sodium, and potassium, A., 1470.
- Hamill, W. H., and Freudenberg, W., quantitative isotopic exchange reactions in the carbohydrate group, A., 1212.
and La Mer, V. K., influence of H₂O and H¹⁸H₂O on mutarotation of glucose, A., 309.
- Hamilton, B., and Schwartz, R., effect of deprivation of water on composition of animal tissues, A., 892.
- Hamilton, C. C., and Henderson, K., control of orchid weevil (*Diorymerellus laevimargo*, Champ.), B., 247.
- Hamilton, C. S. See Biswell, C. B., Craig, W. E., Lowe, W. G., Stevinson, M. R., and Sweet, L. A.
- Hamilton, G. S., kilns for drying grain, etc., (P.), B., 1116.
- Hamilton, J. M., apple scab and spray materials for its control in the Hudson valley, B., 647.
See also Horsfall, J. G.
- Hamilton, R. T. See Connell, L. C.
- Hamister, V. C. See Chaney, N. K.
- Hamlett, G. W. D., effects of antuitrin-S and pituitary extract on the armadillo ovary, A., 1032.
- Hamlin, M. L. See Barrett Co.
- Hamlyn, W. L., Branion, H. D., and Cavers, J. R., influence of protein on growth of ducks, A., 388.
- Hamm, J. A., is the beater obsolete [in paper-making]? B., 764.
- Hammarsten, E. See Caspersson, T.
- Hammarsten, H. See Caspersson, T.
- Hammell, R. H. See Houdry Process Corp.
- Hammer, B. W., bacteriological defects in butter and their prevention, B., 1161.
See also Goss, E. F., Lane, C. B., and Michaelian, M. B.
- Hammer, O. H., kerosene against apple-maggot pupae, B., 327.
- Hammerich, T. See Liebermann, H.
- Hammermill Paper Co. See Parsons, J. L.
- Hammerschmid, H. See Brunner, J.
- Hammersley, W. H. See Ralls, J. O.
- Hammett, F. S., chromosome and aster dimensions of dividing cells in regenerating tissues of *Clymenella torquata* exposed to thiol and sulphoxide, A., 420. Thiol postulate for cell proliferation, A., 672.
- Hammett, L. P., and Lowenheim, F. A., electrolytic conduction by proton jumps: transference number of barium hydrogen sulphate in solvent sulphuric acid, A., 169.
See also Walden, G. H.
- Hamnick, D. L., and Sixsmith, G., complex formation between polynitro-compounds and aromatic hydrocarbons. I. Finite reaction rates, A., 828.
and Wilmut, H. F., parachors of ethyl orthoformate and triphenylmethane, A., 432.
See also Anderson, K. D.
- Hammond, P. D. See Dougherty, G.
- Hammond, R. A. F. See Hothersall, A. W.
- Hammond, W. A., use and regeneration of drierite [CaSO₄], A., 1342.
- Hammond, W. E. See Thomas, B. H.
- Hamner, K. C. See Pentzer, W. T.
- Hamon, V. See Du Nöuy, P. L.
- Hamond, J. B., storing walnuts during winter, B., 1021.
- Hamor, W. A., Duecker, W. W., and Texas Gulf Sulphur Co., plastic [sulphur], (P.), B., 673.
- Hamous, J., fall of alkalinity of beet juice during processing, B., 328.
- Hampel, J., active oxides. XC. Enhanced sorptive power of nascent zinc chromite, A., 930.
- Hampshire, C. H., and Page, G. R., sulphuric acid test for liquid paraffin, B., 205. Determination of camphor in galenicals by means of 2:4-dinitrophenylhydrazine, B., 253. Assay of strong ointment of mercuric nitrate [B.P.], B., 605.
- Hampson, G. C. See Bergmann, E., and Sutton, L. E.
- Hampton, W. H. See Standard Oil Co. of California.
- Hampton, W. M., physical properties of glass, B., 673.
and Gould, C. E., implications of known variation in strength of glass, B., 100.
- Hamre, C. J., and Miller, C. D., spleen, hemoglobin, and erythrocytes in nutritional anemia of the rat, A., 1400.
- Hamson, L. E., and Brixworth Brick & Tile Co., Ltd., building and refractory bricks or blocks, (P.), B., 1046.
- Han, C. T. See Chuang, C. K.
- Han, K. See Matsumo, K.
- Hanack, B., and Mertens, E., baking agent and improvement of dough, (P.), B., 700.
- Hanák, M. See Karczag, L.
- Hance, F. E., [soil] chemistry [report], B., 420. Rapid determination of easily-soluble nutrient concentrations in Hawaiian soils, B., 471.
- Yuen, Q. H., Hamamura, E. K., Nishimura, T., and Chu, P. E., potassium occurring in irrigation water in relation to plant fertilisation, B., 373.
- Hancock, C. W., and Commercial Solvents Corp., production of butyl alcohol by fermentation, (P.), B., 650.
- Hancock, E. G. See Hoffert, W. H., and Nat. Benzole Co., Ltd.
- Hancock, R. S. See Hercules Powder Co.
- Hand, D. B., refractivity of protein solutions, A., 638. Correlation of viscosities of protein solutions with their ability to crystallise, A., 1266.
- Hand, W. H., level dyeing of cuprammonium [rayon] hosiery, B., 897.
- Handa, M. See Sakurazawa, K.
- Handelsman, M. B., Golden, L. A., and Pratt, Joseph H., effect of variations in diet on absorption of food in absence of pancreatic digestion, A., 242.
- Handforth, S. L., and Tilley, J. N., catalysts for oxidation of ammonia to oxides of nitrogen, B., 590.
- Handke, K. See Mannich, C.
- Handley, R. See Pratt, D. D.
- Handorf, B. H., and Washburn, E. R., change in surface tension of a solution of methyl acetate due to hydrolysis, A., 1070.
See also Washburn, E. R.
- Handovsky, H., copper, blood-sugar, and adrenaline, A., 1262.
and Schepens, C., mechanism of stimulant action of dinitro-derivatives on cellular respiration, A., 526.
See also Goormaghtigh, N.
- Handrek, H., current lead-in for vacuum vessels, A., 1097.
- Handwerk, E. C. See New Jersey Zinc Co.
- Handy & Harman. See Leach, R. H.

- Hanel, R., application of chromium-nickel alloys in chemical technology, B., 361.
- Hanford, W. E., and Adams, R., structure of vasine. II. Synthesis of deoxyvasine, A., 873. Stereochemistry of diphenyls. XLI. Effect of 4'-substitution on the rate of racemisation of 2-nitro-6-carboxy-2'-methoxydiphenyl, A., 1364.
- Liang, P., and Adams, R., constitution of vasine, A., 365.
- See also Morris, R. C.
- Hanford, Z. M., Supplee, G. C., and Wilson, L. T., iodine content of milk as affected by feeding iodised dry milk, A., 647.
- Hanisch, G. See Butenandt, A.
- Hankins, G. A., and Mills, H. R., resistance of spring steels to repeated impact stresses, B., 634.
- Hanks, W. V. See Standard Oil Development Co.
- Hanley, F. See Nicholson, H. H.
- Hanlon-Buchanan, Inc. See Bludworth, J. E.
- Hann, G. L., and U.S. Gypsum Co., reduction of granular materials, (P.), B., 1074.
- Hann, R. M., 5-chloroveratrylidenehippuric acid and some of its derivatives, A., 82. 5-Chloro-3,4-dimethoxyecinnamic acid and some of its esters, A., 860.
- and Hudson, C. S., preparation of α -aldose acetates from acetylated glycosides, A., 68.
- and Wetherill, J. P., *p*-fluorophenacyl alcohol and some of its esters, A., 209.
- See also Richtmyer, N. K., and Wetherill, J. P.
- Hannam, J. N. R. See Tucker & Co., Ltd., J. H.
- Hannay, W. H., and Bryden, J., electrolytic zinc from fume produced from Trail lead blast-furnace slags, B., 771.
- Hanne, M., toxic gases; adjuvant groups in organic halogen compounds, A., 1022.
- Hanne, R., importance of air in sterilisation, B., 44.
- Hannerz, E., substitution equilibrium between different halogens in α -halogenofatty acids, A., 34.
- Hanning, F., comparison of vitamins-B₁ and -B₂ in canned strained foods, B., 122.
- Hannon, A. H., electrochemical treatment [plating] machine, (P.), B., 596.
- Hannon, R. R. See Liu, S. H.
- Hannum, C. W., and Gasoline Anti-oxidant Co., [gum inhibitors for] motor fuels, (P.), B., 937.
- See also Du Pont de Nemours & Co., E. J.
- Hano, J. See Supniewski, J. V.
- Hanovia Chemical & Manufacturing Co., and Trebler, H. A., devices for irradiation of milk with ultra-violet rays, (P.), B., 700.
- Trebler, H. A., and Larsen, C. J., apparatus for treatment of fluids with ultra-violet radiations, etc., (P.), B., 911.
- Hansen, A. M. See Morgan, A. F.
- Hansen, C. J. See Koppers Co. of Delaware.
- Hansen, G., relation between Scheiner and DIN sensitivities, B., 478.
- Hansen, J., and Shell Petroleum Corp., lubricating oils, (P.), B., 217. [Filter-] clay-burning furnace, (P.), B., 530.
- Hansen, J. E., and Irwin, J. T., use of a nickel dip in enamelling practice, B., 901.
- Hansen, K., Rustung, E., and Hveding, J., heavy water content of French and other mineral waters, A., 841.
- Hansen, L. A., and Williams, J. W., electrocapillary curve and its displacement with concentration and temperature, A., 826.
- Hansen, M. E., and Amer. Anode, Inc., making of rubber articles [from latex], (P.), B., 643.
- Hansen, P. A., colour reaction of ammonia with hypobromite and thymol, A., 1337.
- Hansen, F. A. See Du Pont de Nemours & Co., E. J.
- Hansen, W. C. See Ashley, K. D.
- Hansen, W. W. See Webster, D. J.
- Hansgird, F., electrothermal production of magnesium, B., 637.
- and Amer. Magnesium Metals Corp., metallic magnesium, (P.), B., 193.
- Hansley, F. L. See Du Pont de Nemours & Co., E. J.
- Hanslin, M., and Kyburz, C., devices for filtering liquids, (P.), B., 50.
- Hansma, J. J., ψ -salicylic acid reaction [for testing bread-wrapping papers], B., 491. [Chlorine] content and stability of commercial chlorinated alkaline bleaching solutions, B., 493.
- Hanson, A. C. See Pearce, J. N.
- Hanson, C. J. See Koppers Co. of Delaware.
- Hanson, C. W. See Betterton, J. O.
- Hanson, D., and Pell-Walpole, W. T., constitution and properties of cadmium-tin alloys, A., 440.
- and Sandford, E. J., properties of tin containing small amounts of aluminium, manganese, or bismuth, B., 552.
- and Slater, J. G., unsoundness in aluminium sand castings. III. Solidification in sand moulds under pressure, B., 553.
- and Wheeler, M. A., properties of some special bronzes, B., 952.
- Hanson, E. R. See Brown, S.
- Hanson, G. B., and Petroleum Rectifying Co. of California, bushing for [electrical] dehydrators, (P.), B., 813.
- Hanson, L. I. See Smith, L. I.
- Hanson, M. E., and Sturtevant Co., drying cylinder, (P.), B., 786.
- Hanson & Orth. See Worden, E. C.
- Hanson-Van Winkle-Munning Co., fluxes for use in galvanising [iron], (P.), B., 907.
- See also Baldwin, A. T.
- Hanstock, R. F., Jordan, L. A., and Brit. Paint, Colour, & Varnish Manufs. Res. Assoc., apparatus for measuring hiding power and opacity of light-diffusing materials, (P.), B., 1056.
- Hantzsch, A., constitution of hypophosphoric acid, A., 149.
- and Burawoy, A., [law of periodicity], A., 487. Constitution of triaryl-methyl derivatives, A., 487.
- Hanus, E., case-hardening [of iron and steel], (P.), B., 314.
- Hanusch, F. See Dirscherl, W.
- Hanzal, R. F., and Hayman, J. M., jun., measurement of creatinine clearance, A., 242.
- See also Bing, F. C., and Spies, T. D.
- Hanzawa, T., solar ultra-violet rays. IV., B., 1060.
- Hanzelka, F. See Olejníček, H.
- Happel, J., and Robertson, D. W., removal of mercaptans from naphtha by caustic [soda], B., 387.
- Happey, F. See Brit. Celanese.
- Happold, F. C., and Hoyle, L., *coli*-tryptophan-indole reaction. I. Enzyme preparations and their action on tryptophan and indole derivatives, A., 1163.
- Hara, R. See Abe, Suekichi, and Sakurazawa, K.
- Harada, G., physical requisites for chemical reaction of aromatic compounds, A., 852.
- Harada, Masao, high-frequency conductivity of solution of magnesium sulphate in a mixture of glycerol and water, A., 37. Origin of Kwanto loam, B., 1059.
- and Titani, T., concentration of deuterium in some industrial waters, A., 44. Isotopic fractionation of water by distillation, A., 458. Isotopic composition of rain-water and snow, A., 953, 1219.
- See also Okabe, K., and Titani, T.
- Harada, Mitsuru, weathering of volcanic rocks. I. and II. Basalts, A., 1347.
- Harada, T., organic salts containing iron and calcium, A., 606. Action of chloride fluxes on oxides contained in aluminium, B., 1049.
- Harai, K. See Shibata, Y.
- Haraldsen, H., systematic studies in combination. LXIII. System rhenium-phosphorus, A., 302. Magneto-chemical investigations. XVI. Magnetic investigation of system CoS-CoS₂, A., 1312.
- and Klemm, W., magneto-chemical investigations. XV. Magnetic behaviour of a number of sulphides with pyrites structure, A., 1197.
- and Kowalski, B., magneto-chemical investigations. XVII. Magnetic behaviour of chalcogenides of bivalent chromium, A., 1453.
- Harand, J. [with Emich, F.], critical temperatures as microchemical test, A., 437.
- Harbell, F., printing of coir [coconut-fibre] mats, B., 765.
- Harber, L. S., Pornton, J. E., Baker Perkins, Ltd., and Soc. Anon. Anc. Établ. A., Savy Jeanjean, & Co., soap-moulding plant, (P.), B., 464.
- Harcourt, G. A., minor chemical constituents of some igneous rocks, A., 841.
- Hardacre, R. W. See Imperial Chem. Industries.
- Harde, E., and Kobozieff, N., influence of vitamin-A and -D on the frequency of tumours in mice, A., 236.
- and Thomson, A. E., vitamin-C and alexin, A., 882.
- See also Greenwald, C. K.
- Harder, A. See Zintl, E.
- Harder, E. H. See Wiley, R. M.
- Harder, L. A. See Povolotskaja, K. L.
- Harder, O. E., metals and alloys in dentistry, B., 28.
- Harder, R., and Stömer, I., flower development and hormone action, A., 1039. Follicular hormone and time of blooming of hyacinths, A., 1431.
- Hardesty, J. O. See White, L. M.
- Hardgrove, R. M., and Fuller Lehigh Co., grinding mill with air-sealing device, (P.), B., 386. Operation of grinding mills, (P.), B., 434.
- Hardie, T., and Mair, J. A., action of zinc dust and alcohol on hydrochlorides of gutta-percha and balata, A., 1349. Condensation of balata bromide with phenols and phenolic ethers, A., 1501.

- Hardiman, J., Keane, J., and Nolan, T. J., chemical constituents of Irish lichens; *Lecanora gangleoides*. I., A., 550.
- Hardin, L. J. See MacIntire, W. H.
- Harding, C. T. See Standard-I. G. Co.
- Harding, J. See Ditchburn, R. W.
- Harding, J. B. See Adam, N. K.
- Harding, L. F. See Hathaway, C. S.
- Harding, P. L., physiological behaviour of Grimes Golden apples in storage, B., 826.
- Harding, Ltd., S. G., & P. See Leuch, W. P.
- Hardinge, H., air classification in pulverising, B., 49.
and Hardinge Co., Inc., liquid clarifier and thickener, (P.), B., 1026.
- Hardinge Co., Inc. See Hardinge, H.
- Hardman, A. F., and Barbehenn, H. E., determination of free sulphur in rubber, B., 512.
- Hardon, H. J., and White, J. T., burnt soil, B., 964.
and Wirjodihardjo, W., determination of magnesium in hydrochloric acid soil extracts by the "oxine" [8-hydroxyquinoline] method, B., 164.
- Hardt, G., and Amer, Bemberg Corp., [low-lustre] artificial silk, (P.), B., 401, 1137, 1138.
- Hardtmann, M., and Werner, A., treatment of steel tools, (P.), B., 999.
- Hardwick, P. J., interaction of alkyl iodides and sodium *m*-4-xylyloxyde in ethyl alcohol, A., 453.
- Hardy, D. V. N., preparation of aryl-carbimides, A., 206.
- Hardy, F., phosphate status of sugar-cane soils, B., 917. Graphs for calculating lime requirements [of soils], B., 918.
- McDonald, J. A., and Rodriguez, G., leaf analysis as a means of diagnosing nutrient requirements of tropical orchard crops, B., 1157.
- Robinson, C. K., and Rodriguez, G., West Indian soils. VIII. Agricultural soils of St. Vincent, B., 1009.
See also Rodriguez, G.
- Hardy, J. W., gas-oil separators, B., 934.
- Hardy, M. B. See Crane, H. L.
- Hardy, V. R. See Smith, G. Frederick.
- Hardy Metallurgical Co., stainless steel or iron alloys, (P.), B., 461.
- Hare, D. C., allergic factor in aetiology of non-specific colitis, A., 1401.
- Hare, D. G. See Kirkpatrick, P.
- Hart, A., filter, (P.), B., 788.
- Hariba, H., age-hardening of lead alloys, B., 500.
- Haring, H. E., and Compton, K. G., generation of stibine by storage batteries, B., 1001.
and Thomas, U. B., electrochemical behaviour of lead, lead-antimony, and lead-calcium alloys in storage cells, B., 1001.
- Haring, H. W., and Creydt, R., [agent for] combating of insect pests, etc., (P.), B., 256.
- Harrington, C. R., biochemical basis of thyroid function, A., 1171.
and Mead, T. H., synthesis of glutathione, A., 1110.
See also Canzanelli, A.
- Hariss, Z. See Beznák, A. B. L.
- Harker, D., crystal structure of tetradymite, $\text{Bi}_2\text{Te}_2\text{S}$, A., 17.
- Harker, G., enzyme action in relation to biological effects of radiation, A., 783.
- Harkins, H. N., and Harmon, P. H., depressor extracts of human tissues, A., 396.
- Harkins, W. D., hemi-alpha groups in atomic nuclei as related to the energy of binding, A., 8.
and Gans, D. M., mass of the neutron, A., 143. Emission of γ -rays in nuclear reactions, A., 276.
- Gans, D. M., and Newson, H. W., neutron of high velocity, and energy relations for nuclear disintegration by non-capture, A., 7. Disintegration of fluorine nuclei by neutrons and probable formation of a new isotope of nitrogen (N^{16}), A., 277. Disintegration of the nuclei of light atoms by neutrons. II. Neon, fluorine, and carbon, A., 277.
- Ries, H. E., jun., and Carman, E. F., surface pressures and potentials of unimolecular films of long molecules: polymerides of ω -hydroxydecoic acid, A., 698.
See also Gans, D. M.
- Harkness, A. M. See Gen. Chemical Co.
- Harkness, R. W. See Emmett, P. H.
- Harkort, H., lead-fast lead glazes not injurious to health, B., 674.
- Harlan, H. R., colour-permanency of synthetic and natural iron oxides, B., 598.
- Harlan, J. D. See Collison, R. C.
- Harlay, V., silver derivatives of thiosemicarbazide and of thiosemicarbazones, A., 737.
- Harley, C. P., and Masure, M. P., interrelation of leaf area, soil moisture, and nitrogen to fruit growth and fruit-bud formation in the apple, B., 117.
- Harley, J. L., culture methods for fungi, A., 535.
- Harlow, E. A., radiography in southern India, B., 1069.
- Harman, M. W., and Rubber Service Labs. Co., reaction products of mercaptoarylthiazoles and organic acid halides, (P.), B., 140. Vulcanisation of rubber, (P.), B., 241. Diarylthiazyl disulphides, (P.), B., 349.
- Harman, S. W., Reed, T. W., and Mack, G. L., insecticidal efficiency of various nicotine compounds for control of the codling moth, 1934, B., 742.
See also Hartzell, F. Z.
- Harmon, C. See Howard, G. C.
- Harmon, J. B. See Wiener, J. A.
- Harmon, P. H. See Harkins, H. N.
- Harms, J., and Jahr, K. F., principles of conductometry, A., 598.
See also Jander, G.
- Harned, H. S., thermodynamic properties of uni-univalent halide mixtures in aqueous solution, A., 1461.
and Embree, N. D., ionisation constant of acetic acid in methyl alcohol-water mixtures from 0° to 40° , A., 1321.
- and Hamer, W. J., thermodynamics of aqueous sulphuric acid solutions from e.m.f. measurements, A., 301. Molal electrode potentials and reversible e.m.f. of the lead accumulator from 0° to 60° , A., 305.
- and Mannweiler, G. E., thermodynamics of ionised water in sodium chloride solutions, A., 1461.
- and Thomas, H. C., molal electrode potential of silver-silver chloride electrode in methyl alcohol-water mixtures, A., 1324.
- Harner, H. R., and Chubb, M. F., effect on storage-battery performance of keeping period between preparation and testing, B., 1001.
See also Chubb, M. F.
- Harnwell, G. P., and Bleakney, W., relative abundance of lithium isotopes, A., 1295.
- Bleakney, W., Van Voorhis, S. N., and Kuper, J. B. H., Faraday effect at high frequencies, A., 141.
See also Van Voorhis, S. N.
- Harold, B. A., [finishes for] textiles, and newer synthetic organic chemicals, B., 1041.
- Harold, C. H. H., chemical and bacteriological examination of London waters, B., 1168.
- Harper, G. I., crystal and slit systems for X-ray monochromatisation and spectroscopy, A., 1193.
- Harper, H. J., and Daniel, H. A., chemical composition of certain aquatic plants, A., 265.
Daniel, H. A., and Murphy, H. F., total nitrogen, phosphorus, and calcium contents of common weeds and native grasses in Oklahoma, A., 552.
See also Daniel, H. A.
- Harper, L. R., and Powell, D. W., ferro-prussiate paper and prints therefrom, (P.), B., 702. Photographic diazo-type prints, (P.), B., 1119.
- Harper, T. See Mrak, E.
- Harper, T. E., jun., and Reinberg, G., modified Betts process yields refined lead bullion, B., 1051.
- Harper, W. R., theory of coagulation of colloids and of smokes, A., 700. Theory of ionic recombination, A., 1193. Theory of combination coefficients for large ions, A., 1294.
- Harr, R., inorganic addition salts in nickel-plating solution, B., 998.
- Harrell, C., Bates, J. B., and Dixon, H. E., classifier, (P.), B., 210.
- Harrell, J. W., and Schiff, H., hydrogen generator for internal-combustion engines, (P.), B., 441.
- Harrington, J. F., development of secondary [alcohol and ketone] solvents, B., 714.
- Harrington, P. J. See Standard Oil Development Co.
- Harrington, R. H., present status of age-hardening, B., 191.
- Harris, B. R., [cosmetic, etc.] compositions, (P.), B., 288. Margarine, (P.), B., 1150.
See also Epstein, A. K.
- Harris, C. G. See Imperial Chem. Industries.
- Harris, D., emergency stopper for nitric acid bottles, A., 840.
- Harris, E. J., and Bovée, B. A., electric furnaces for ceramic firing, B., 851.
- Harris, F. W. See Tainton, U. C.
- Harris, G. D., and Industrial Dryer Corp., material [tobacco] conditioning, (P.), B., 381. Treatment of tobacco and similar materials with conditioned gas, (P.), B., 381. Apparatus for treating [conditioning] materials, (P.), B., 531. Conditioning of tobacco and similar materials, (P.), B., 607.
- Harris, H. C., comparison of potassium permanganate and ceric sulphate for oxidation of cobaltinitrite in determination of potassium in potassium chloride solution and in ammonium acetate soil extracts, B., 1157.

- Harris, H. J. See Gardner, W. H.
- Harris, I., Alfred, C. N., and English, A. G. H., effect of high-protein diet on arterial pressure in cases of hypertension, A., 1013.
- Rubin, E. L., and Lawrance, J. S., salyrgan and ammonium chloride in cardiac edema, A., 1010.
- Rubin, E. L., and Shutt, W. J., glass electrode for determining the p_{H} of venous blood, A., 104.
- Harris, L., and Kaminsky, J., precision actinometer for the ultra-violet region (including an exact test of the Einstein equivalence law), A., 1097.
- Kaminsky, J., and Simard, R. G., absorption spectrum of malachite-green leucocyanide and mechanism of the dark reaction after photolysis, A., 1052.
- and Parker, A. S., chemiluminescence of 3-aminophthalhydrazide, A., 1469.
- See also Johnson, E. A., Luhr, O., and Salstrom, E. J.
- Harris, L. J., flavin and the pellagra-preventing factor as separate constituents of a complex vitamin- B_2 , A., 545.
- and Ray, S. N., diagnosis of vitamin-C subnutrition by urine analysis; anti-scorbutic value of human milk, A., 417.
- See also Ray, S. N.
- Harris, M., effect of alkalis on wool, B., 896.
- See also Kanagy, J. R., and Neville, H. A.
- Harris, M. M. See Brand, E.
- Harris, N. L. See Gen. Electric Co.
- Harris, P. L., and Smith, J. C., addition of hydrogen bromide to non-terminal double linkings; isoundecenoic acid, A., 1223.
- See also Dutcher, R. A., and Smith, J. C.
- Harris, P. M. See Biefeld, L. P.
- Harris, R. B., and Wood Chem. Products Co., construction of bituminous macadam roads, (P.), B., 409.
- Harris, R. I. See Armstrong, A. R.
- Harris, R. M., and Smith, J. C., n -propyl and n -butyl gallate, A., 1237.
- Harris, S., secondary structure in calcite, A., 1450.
- Harris, S. A. See Smith, L. I.
- Harris, S. E., and Christiansen, W. G., therapeutic substances derived from unsymmetrical diphenyl compounds. III. Aryl esters of hydroxydiphenyls, A., 1233.
- Christiansen, W. G., and Squibb & Sons, E. R., mercury derivatives of substitution products of diphenylphenolphthalein, (P.), B., 175.
- See also Christiansen, W. G., and Moness, E.
- Harris, T. L., Hirst, E. L., and Wood, C. E., optical rotatory dispersion in the carbohydrate group. IV. Tetramethyl-mannonolactone, A., 66.
- Harris, W. See Hughes, A. L.
- Harrison, A. A. See Du Pont de Nemours & Co., E. I., and Imperial Chem. Industries.
- Harrison, A. S. See Hoskins, W. M.
- Harrison, C. F. R., and Wallis, A. E., preparation and purification of nickel carbonyl, (P.), B., 544. Nickel carbonyl, (P.), B., 803. Purification of crude nickel carbonyl, (P.), B., 900.
- Harrison, E., halogenation of diacetyldianisidine, A., 615. Nitration of s -diarylcaramides, A., 1359.
- Harrison, E. P., Turney, G. L., and Rowe, H., electrical properties of wires of high permeability, A., 815.
- Harrison, G. B. See Renwick, F. F.
- Harrison, G. R., and Albertson, W., arc and spark spectra of cerium, A., 1438.
- Harrison, H. See Quain, J. R.
- Harrison, H. A., laboratory beating characteristics of some grass and wood-pulp fibres, B., 16.
- Harrison, H. E. See Lavietes, P. H.
- Harrison, J. See Allen, L. A., Don, J., and Easson, A. P. T.
- Harrison, J. B. See Challenger, F.
- Harrison, J. W. See Houdry Process Co.
- Harrison, R. H., production of a negative by reversal, (P.), B., 1070.
- Harrison, T. R., and Brown Instrument Co., measurement of thermal conductivity [of gases], (P.), B., 883.
- Harrison, W. D. See Kress, O.
- Harrison, W. N., Shelton, S. M., and Wadleigh, W. H., strength and Young's modulus of some ground-coat enamels for sheet iron, B., 453.
- Harrison, J. W. E. See Lawall, C. H.
- Harrop, G. A., Nicholson, W. M., Soffer, J. L., and Strauss, M., extracellular and intracellular water loss during suprarenal insufficiency in the dog, A., 1421.
- Harrop Ceramic Service Co. See Hartford, F. M.
- Harrow, B., Naiman, B., Chamelin, I. M., and Mazur, H., "fat-metabolism" hormone and hyperglycemia, A., 411.
- Harsch, J. W., and Leeds & Northrup Co., heat treatment [of metals], (P.), B., 313.
- Harshaw, W. J., and Harshaw Chem. Co., metallic composition, (P.), B., 1051.
- Harshaw Chemical Co., enamel opacifier, (P.), B., 769.
- See also Harshaw, W. J., and Long, K. E.
- Hart, A., and Keenol Lubricants, Ltd., preparation for masking surfaces for painting, (P.), B., 33.
- Hart, C., and Jackson, W. S., duplex puddling [of iron], (P.), B., 503.
- Hart, D. H., and Papa, D., transposition of insoluble tartrates by means of sodium carbonate solution, A., 731.
- Hart, E. B. See Chang, C. Y., Elvehjem, C. A., Fargo, J. M., Knowles, H. R., Phillips, P. H., Sherman, W. C., and Stirn, F. E.
- Hart, E. J. See Fricke, H.
- Hart, F. P. See Schrader, L. F.
- Hart, G. H. See Cole, H. H.
- Hart, H. H., and Dillinger, C. E., condensing separator [for hard water], (P.), B., 4.
- Hart, L. P. See Gardner, H. A.
- Hart, M. C., and Andersen, H. P., mercury alkyl derivatives, A., 202. Organic mercurials, A., 997.
- Hart, R., determination of active ingredients and total fatty matter in sulphonated and sulphated oils, B., 641. Dispersing and regenerating agents for lime soaps, B., 683.
- Hartelius, V. See Nielsen, N.
- Harter, H., oxidation of hydrocarbons, (P.), B., 1130.
- Hartford, F. M., Brush, G. D., and Harrop Ceramic Service Co., tunnel kiln, (P.), B., 454.
- Hartford, W. H. See Schumb, W. C.
- Hartford-Empire Co. See Ryan, C. F., Wadman, H. A., and Willetts, P. G.
- Hartgen, F. A. See Herty, C. H., jun.
- Hartisch, J., metabolic physiology of leaf-roll in potatoes, A., 554.
- Hartley, C. J. See Hartley, J. A.
- Hartley, F., and Linnell, W. H., use of diphenylamine in assay of saccharated iron compounds, B., 253.
- Linnell, W. H., Read, F. E., and Rolfe, H. G., determination of metallic iron in presence of iron oxides; reduced iron, A., 720.
- Hartley, G. S., application of Debye-Hückel theory to colloidal electrolytes, A., 298.
- See also Malsch, J., Moilliet, J. L., and Murray, R. C.
- Hartley, (Sir) H. See Macfarlane, A.
- Hartley, J. A., Hartley, C. J., and Hartley, J. W., diffusers for blowing air or other gas into liquids, (P.), B., 435.
- Hartley, J. W., filter-presses, (P.), B., 387.
- See also Hartley, J. A.
- Hartley, O. P. See Elmquist, R. E.
- Hartley, P. See Douglas, S. R.
- Hartley, W. See North Brit. Rayon, Ltd.
- Hartline, H. K. See Lucké, B.
- Hartman, C. D. See Standard Telephone & Cables.
- Hartman, F. E., Montgomery, F. H., and Montgomery, W. R., purification of air, (P.), B., 415.
- Hartman, H. B., ozone, (P.), B., 992. Ozone generator, (P.), B., 1142.
- Hartman, J. O., effects of storage temperature on propagation value of potato tubers, A., 419.
- Hartman, R. J., Kanning, E. W., and Klee, F. G., Liesegang phenomenon applied to banded malachite, A., 445.
- See also Conn, K. E.
- Hartman, W. H. See Eastman Kodak Co.
- Hartmann, A. C., differentiation of artificial and fermentation vinegars, B., 41.
- Hartmann, A. F., treatment of severe diabetic acidosis; comparison of methods, with reference to use of sodium d -lactate, A., 1527.
- Hartmann, C. P. E. See under Chem. Fabr. Halle-Ammendorf Gebr. Hartmann.
- Hartmann, E. See Seebaum, H.
- Hartmann, F. K., and Meyer, F., variations in analytical results for hydrochloric acid extracts [of soils], especially regarding silica and alumina, B., 164.
- Hartmann, J. See Fink, H.
- Hartmann, M., and Locher, F., allo-pregnandiol, a new alcohol from urine of pregnancy, A., 210, 341.
- Hartmann, O. See Lüers, H.
- Hartmann, W. K. R. See under Chem. Fabr. Halle-Ammendorf Gebr. Hartmann.
- Hartnagel, J. See Mohler, H.
- Hartner, F., determination of small amounts of thiocyanate in biological fluids, A., 422.
- Hartong, B. D., oxidation-reduction potential during manufacture of beer, B., 203.
- Hartree, D. R., calculations of atomic wave functions. IV. Results for F^+ , Al^{++} , and Rb^+ , A., 1187.
- and Hartree, W., self-consistent field, with exchange, for beryllium, A., 912. Calculations of atomic wave functions. III. Results for beryllium, calcium, and mercury, A., 912.
- Hartree, E. F. See Keilin, D.
- Hartree, W. See Hartree, D. R.
- Hartridge, H., ground Congo-red-fibrin for testing rates of action of enzymes, A., 123.
- Hartrott, R. See Bergmann, E.

- Hartshorne, N. H. See Davies, E. S.
- Hartt, C. E., water and [sugar] cane ripening, A., 549.
- Hartung, P. See Benrath, A.
- Hartung, W. H., Munch, H. C., and Crossley, F. S., amino-alcohols. X. Ring-substituted propadrines, A., 972.
- Hartwell, J. L. See Fieser, L. F.
- Harty, E. A. See Gen. Electric Co.
- Harty, J., influence of depolarisers on photovoltaic effect in cells containing Grignard reagent, A., 706.
- Hartzell, A., and Wilcoxon, F., organic thiocyanogen compounds as insecticides, B., 38.
- See also Wilcoxon, F.
- Hartzell, F. Z., Harman, S. W., and Reed, T. W., tar distillate and tar-lubricating oil sprays, B., 969.
- Hartzler, E. R. See Dutcher, R. A., and Holmes, H. N.
- Hartzler, H. H., transparency of thin metallic films in the ultra-violet, A., 1200.
- Harukawa, C., and Kumashiro, S., [insecticidal] fumigation with chloropicrin, B., 374.
- Harvel Corporation. See Harvey, M. T.
- Harvey, A., and Bell, H., band spectrum of beryllium monoxide, A., 805.
- Harvey, A. R., and Gardner-Richardson Co., froeness tester [for paper pulp], (P.), B., 541.
- Harvey, A. W., and Squibb & Sons, E. R., preparation of 1-phenyl-3:4-dihydroxybenzene [3:4-dihydroxydiphenyl], (P.), B., 140.
- See also Christiansen, W. G.
- Harvey, C. L., effect of cold-work on physical properties of cold-headed [steel] bolts, B., 190.
- Harvey, C. O., support for crucibles, A., 723. Determination of iodine in biological substances, A., 1182.
- Harvey, E. N. See Danielli, J. F., Lucké, B., and Taylor, G. W.
- Harvey, E. W. See Barrett Co.
- Harvey, F. A., problems in utilisation of Pennsylvania fireclays, B., 271. Comparison of used silica brick from insulated and uninsulated basic open-hearth roofs, B., 454.
- Harvey, F. E. See Birch, R. E.
- Harvey, H. W., Cooper, L. H. N., Lebour, M. V., and Russell, F. S., plankton production and its control, A., 1281.
- Harvey, M. T., and Harvel Corp., composition of matter [plastic, adhesive, etc.], (P.), B., 110. Manufacture and use of compositions [germicide from cashew nutshell liquid], (P.), B., 128. [Waterproof and insulating] compositions, (P.), B., 903.
- Harvey, N. D., jun. See Carbide & Carbon Chem. Corp.
- Harvey, R. B. See Nelson, R. C.
- Harwood, H. F. See Bennett, Hilda, and Hume, W. F.
- Harwood, P. D., effect of certain physical factors on the *in-vitro* testing of anthelmintics, A., 395.
- See also Lamson, P. D.
- Hase, F., and Beneš, A., welding of carbon steels with resistance-heating, B., 634.
- Hase, R., reflecting properties of aluminium and its alloys as dependent on surface treatment, B., 501, 636.
- Hasegawa, J. See Sakuma, I.
- Hasegawa, M. See Yoshimatsu, S. I.
- Haseman, J. D., revivification of filtering materials, (P.), B., 4.
- Hasenkamp, J. See Fischer, Hans.
- Hashima, H. See Nishida, Kitsuji.
- Hashizume, S. See Shidei, J.
- Haskelberg, L., Tschitschibabin condensation of butaldehyde and ammonia, A., 627.
- See also Weizmann, M.
- Haskelite Manufacturing Corporation. See Rozema, C. E.
- Haskell, O. S. See Gen. Electric Co.
- Haskins, C. P., and Moore, O. N., inhibition of growth of pollen and mould under X- and cathode-ray exposure, A., 788.
- Haskins, J. F., Schulze, F., and Du Pont Rayon Co., cellulose esters, (P.), B., 447.
- Haslam, J., calcium, strontium, barium, and magnesium oxalates, A., 1338.
- Haslam, R. N. H., Stark effect for mercury, A., 908.
- Haslam, R. T. See Standard-I.G. Co., and Standard Oil Development Co.
- Haslewood, G. A. D., and Roe, (Miss) E., hydrocarbons from neocergosterol, A., 742.
- See also Barry, G., and Cook, James Wilfred.
- Hass, H. B., Hodge, E. B., Vanderbilt, B. M., and Purdue Res. Foundation, nitration of paraffin hydrocarbons, (P.), B., 618.
- McBee, E. T., and Weber, P., syntheses from natural gas hydrocarbons; identity of monochlorides from chlorination of paraffins, B., 1084.
- and Weber, P., analysis of mixtures of monochlorides of *n*- and *iso*-pentane, A., 1103.
- Weston, P. E., and Perdue Res. Foundation, olefine hydrocarbons and derivatives thereof, (P.), B., 839.
- Hass, W. See Eisenlohr, F.
- Hassan, A. See Corbett, G. H.
- Hasse, K. See Micheel, F.
- Hassebrauk, K., significance of soil moisture in behaviour of *Puccinia graminis* and *P. tritici* towards different wheat varieties, B., 244.
- See also Gassner, G.
- Hassel, O. See Frivold, O. E.
- Hasselstrom, T., refined "sulphate-black liquor" tallol, (P.), B., 1150.
- and Bogert, M. T., retene [derivatives]. IV. Synthesis of 6-thiolretene and of related and derived compounds, A., 1386.
- Hasskó, A., mode of action of chemotherapeutic agents. I and II, A., 1030.
- Hassler, E. L., and Roys, H. C., rare elements in Oklahoma sphalerite, A., 322.
- Hastings, A. B. See Barron, E. S. G., Compere, E. L., Davis, J. E., McLean, F. C., and Schlutz, F. W.
- Hastings, J. D., coagulation of alkaline [rubber] latex, B., 162.
- and Rhodes, E., deterioration of raw rubber by manganese contamination, B., 1057.
- Hastings, J. H. H. See Walker, T. K.
- Haswell, A. B., and Cutler, F. G., apparatus for sintering and fusing finely-divided material, (P.), B., 385.
- Hata, K., Tatamatsu, K., and Kubota, B., constitution of the dihydroxy-derivative of diphenylene oxide obtained from resorcinol, A., 1504.
- Hata, S. See Iimori, S.
- Hatada, S., silver-base dental alloy, B., 1098.
- Hatakeyama, T. See Kuriyagawa, T.
- Hatch, G. B. See Bartell, F. E.
- Hatch, R. S., and Internat. Bleaching Corp., bleaching of paper pulp, (P.), B., 987.
- and Weyerhaeuser Timber Co., treatment of chemical pulp, (P.), B., 97.
- See also Wolf, R. B.
- Hatch, T. F., and Kadco Corp., dust-removal device, (P.), B., 883.
- Hatcher, R. A., and Hatcher, R. L., determination of alkaloids with bromine, B., 654.
- and Kwit, N. T., elimination of theobromine and caffeine from the circulation, A., 245.
- Hatcher, R. L. See Hateher, R. A.
- Hatcher, W. H. See Steacie, E. W. R.
- Hatfield, K. G. S. See Stevens, J. L.
- Hatfield, W. H., alloy steels for aircraft construction, B., 728.
- and Bridge, J. F., alloy steels, particularly for cold-drawing dies, (P.), B., 155.
- Hathaway, C. S., and Harding, L. F., [waterproof] coating compositions, (P.), B., 161.
- Hathaway, M. L., and Koch, F. C., pro-vitamin-D potencies, absorption spectra, and chemical properties of heat-treated cholesterol, A., 670.
- See also Rappaport, B. Z.
- Hathorne, B. L., excessive dye [colour] variations encountered in fabrics containing "cable twist" yarn, B., 19.
- Hatoyama, M., and Kimura, M., suggested polarisation of electrons, A., 801.
- Hatta, S., and Baba, A., velocity of absorption of gases by liquids. IV. [Determination of] absorption of carbon dioxide by potassium carbonate solutions by a bubbling method, A., 41.
- Hatz, E. B. See Rusznayk, S.
- Hauck, H. M., effect of fluorine feeding on storage of vitamin-C in the rat and guinea-pig, A., 793.
- Hauduroy, P., apparatus for purification of air, A., 126.
- Haug, A. J., refining [wood-]pulp screen tailings, B., 490.
- Haug, R. J., viscosity indicating device, (P.), B., 579.
- Haugaard, G., determination, with the glass electrode, of p_H of biological fluids, A., 134.
- Hauge, S. M., enzymic destruction of vitamin-A value of lucerne during curing process, B., 332.
- Haughton, J. L., and Payne, R. J. M., alloys of magnesium. III. Constitution of magnesium-rich alloys containing aluminium and cadmium, A., 1199.
- Haultain, H. E. T., apparatus for classifying finely-divided material for size, (P.), B., 83.
- Hauman, E. L., and Exolon Co., cubedral corundum crystal, (P.), B., 1044.
- Haupt, G. W. See Gibson, K. S.
- Haupt, H., harmful influence of ash deposits on surface water, B., 927.
- and Steffens, W., degasification of boiler feed-water, B., 705.
- Hauptfeld, R., arrest-point of pitressin in the kidney, A., 412.
- Hauptmann, H., and Schulze, G. E. R., microvolumenometer, A., 58.
- Haurowitz, F., dilatometric study of denaturation of albumin solutions by heat, A., 822. Blood-pigment. XVII. Human haemoglobins. XVIII. Globin and its haemaffinic groups. XIX. Methaemoglobin and its compounds with hydrogen peroxide, cyanides, fluorides, and sulphides, A., 878.

- Haurowitz, F. [with Clar, E., Hermann, Z., Kittel, H., and Münzberg, F. K.], properties of porphyrin-metal complexes and their dependence on valency and susceptibility of their metallic atoms, A., 1334.
See also Breinl, F.
- Haury, F., Green freeness tester [for pulp], B., 265.
- Hauschild, A. See Fischer, R.
- Hausehold, F., determination of cardio-active glucosides by the stop-photometer, A., 1531.
- Hausen, H., effect of argon on rectification of air, B., 1141.
- Hausen, S. von, effect of vitamin-C (ascorbic acid) on growth of plants, A., 1036.
See also Virtanen, A. I.
- Hauser, C. R., Gillaspie, A. G., and Le Maistre, J. W., thermal decomposition of aldichloroimines, A., 620.
- Le Maistre, J. W., and Rainsford, A. E., removal of hydrogen and acid radicals from organic compounds by means of bases. I. Removal of hydrogen chloride from aldichloroimines by sodium hydroxide; rates of reaction in alcoholic solution, A., 939.
- Hauser, J., action of seed dips in stimulating germination, B., 515.
- Hausman, J., theory of process of sweating of paraffin wax, B., 133.
- Hausman, M. J., evaluation of olive oil foots, B., 509.
- Hausmann, E. O. See Landt, G. E.
- Hausmann, W., and Kuen, F. M., photobiological sensitisation in the ultra-violet by compounds of the acridine and quinoline series, A., 1275.
- Hauss, L., influence of ultra-sound on some physicochemical properties, A., 573. Influence of ultrasonic waves on some physicochemical properties, A., 690.
- Hausser, I., Kuhn, R., and Giral, F., anomalous dispersion of electric waves (3—8 m.) in solutions of organic zwitterions; a molecular resonance phenomenon of sphingomyelin, A., 1304.
See also Gross, H.
- Hausser, K. W., Kuhn, R., and Kuhn, E., optical absorption and double linking. VI. Fluorescence of diphenylpolyenes, A., 1443.
- Kuhn, R., and Seitz, G., optical absorption and double linking. V. Absorption at low temperatures of compounds with conjugated doubly-linked carbon atoms, A., 1443.
- Kuhn, R., and Smakula, A., optical absorption and double linking. IV. Diphenylpolyenes, A., 1300.
- Kuhn, R., Smakula, A., and Deutsch, A., optical absorption and double linking. III. Furan series, A., 1300.
- Kuhn, R., Smakula, A., and Hoffer, M., optical absorption and double linking. II. Polyene aldehydes and polyene carboxylic acids, A., 1300.
- Kuhn, R., Smakula, A., and Kreuchen, K. H., optical absorption and double linking. I. Problems and methods, A., 1300.
- Hausmann, G. See Kolbach, P.
- Haute, J. van den, indicator properties of some dinitro-derivatives, A., 717.
- Hautmann, F., economy of electric firing in the ceramic industry, B., 1143.
- Hautot, A., structure of the K line of beryllium and conductivity electrons, A., 138. Intermediate region [of the spectrum]; structure of the K-lines of the lightest elements, A., 1047.
- Hautville, P. See Vaille, C.
- Haux, E. H., and Duplate Corp., grooving of laminated glass, (P.), B., 546.
- Havard, R. E., effect of X- and γ -rays on indophenol-oxidase, A., 248.
- Havas, L., effects of radioactive mud on germination of seeds and growth of seedlings, A., 795. Ascorbic acid (vitamin-C) and the germination and growth of seedlings, A., 1430. Follicular (oestrus) hormone and plant tumours, A., 1431.
and Caldwell, J., effects of animal hormones on plants, A., 1548.
- Have, J. ten. See Bruin, P.
- Havemann, R. See Groscurth, G.
- Havenhill, R. S., and MacBride, W. B., laboratory machine for evaluating breakdown characteristics of rubber compounds, B., 369.
- Hawes, W., grinding, crushing, pulverising, and mixing mills, (P.), B., 50.
- Haweson, J. I., new tables of hardness for iron and steel, based on Vickers' figures, and corrected according to the method of least squares, B., 272.
- Hawkes, J. B. See Farwell, H. W.
- Hawkes, L., and Smythe, J. A., ankerites from the Northumberland coalfield, A., 956.
- Hawkin, W. B. See Knutti, R. E.
- Hawkins, A. C., distribution of heavy minerals in the clays of Middlesex County, New Jersey, A., 956.
- Hawksley, J. C., copper therapy in nutritional anaemia, A., 1148.
- Hawley, C. G., [surface-]tensional system of [sewage] purification, (P.), B., 48. Disposal of sewage, etc., (P.), B., 48.
and Centrifex Corp., apparatus for treatment of gases, (P.), B., 834. Separator, (P.), B., 882.
- Hawley, J. E., and Beavan, A. P., mineralogy and genesis of the Mayville iron ore of Wisconsin, A., 841.
- Hawley, K. A., and Locke Insulator Corp., application of conducting coatings on insulators, (P.), B., 725.
- Haworth, L. J., energy distribution of secondary electrons from molybdenum, A., 1047.
- Haworth, R. D., and Richardson, T., constituents of guaiacum resin. III. Synthesis of *dl*-guaiaretic acid diethyl ether, A., 485. Constituents of natural phenolic resins. I. Matairesinol, A., 860.
and Sheldrick, G., synthesis of alkylphenanthrenes. VIII. Attempted synthesis of 4:5-dimethylphenanthrene, A., 205.
- Sheldrick, G., and Mavin, C. R., constituents of natural phenolic resins. II. "Sulphite-liquors lactone," A., 860.
- Haworth, W. N., molecular structure of carbohydrates, A., 1354.
- Hirst, E. L., and Oliver, E., polysaccharides. XVIII. Constitution of xylan, A., 201.
- Hirst, E. L., and Plant, (Miss) M. M. T., polysaccharides. XXI. Constitution and chain-length of some starch dextrans, A., 1226.
- Haworth, W. N., Hirst, E. L., and Waine, A. C., polysaccharides. XXII. Constitution and molecular structure of α -amylopectin, A., 1355.
- Hirst, E. L., and Woolgar, (Mrs.) M. D., polysaccharides. XIX. Molecular structure of waxy maize starch, A., 477.
- Raistrick, H., and Stacey, M., polysaccharides synthesised by micro-organisms. I. Molecular structure of mannocarolose produced from glucose by *Penicillium Charlesii*, G. Smith, A., 477.
See also Ault, R. G., and Baird, D. K.
- Haxel, O., nuclear transformation of nitrogen by fast α -rays, A., 426.
- Hay, R., Howat, D. D., and White, J., slag systems, A., 35.
See also White, J.
- Hayashi, K., spectrographic investigation of dyes of the benzopyrylium type. IV. Influence of the substitution of hydroxyl in the benzopyrylium nucleus, A., 1129.
- Hayashi, M. See Ugai, T.
- Hayashi, T., Raman frequency of the C:C linking in alkylidene-cyclohexanes and -cyclohexenes, A., 1054.
- Hayasi, T., theory of magnetostriction, A., 19. Diffraction of electron beams by a crystal lattice, A., 434.
- Haydak, M. H., pigmentation in black-haired rats, A., 1271.
- Hayden, C. E., field tests for chlorine in milk for detection of mastitis, B., 77.
See also Sampson, J.
- Hayek, E., potentiometric investigation of hydroxide precipitation, A., 460. Heavy-metal compounds as neutral constituents of complex cations, A., 1203. Mixed crystal formation with tin oxide, A., 1455.
- Hayes, C. M., determination of accurate formula yields in manufacturing nitrocellulose lacquer, B., 815.
- Hayes, F. A., pressed-felt finishing, B., 897.
- Hayes, W., hot brass and bronze stampings, B., 361.
- Hayes-Gratz, E. F., fabric composed of fibrous materials agglutinated by adhesives, (P.), B., 450.
- Hayford, A. W. See Wallis, J. S.
- Haylett, R. E., and Union Oil Co. of California, asphalt, (P.), B., 10. Treatment of fuel oil, (P.), B., 135. Solvent process [for lubricating oil production], (P.), B., 441.
- Hayman, J. M., jun., Johnston, S. M., and Bender, J. A., creatinine in blood, A., 642.
See also Hanzal, R. F.
- Hayman, W. P., effects of zinc sulphate on frenched citrus [trees] in Polk county [Florida], B., 1158.
- Haynes, F. W., determination of serum-protein by measurement of volume of precipitate, A., 374.
- Haynes Stellite Co., and Wissler, W. A., [hard chromium-cobalt] alloys [for cutting tools], (P.), B., 505.
- Haynn, von, dyeing of Wollstra [yarn] with "benzo fast copper" dyes, B., 1090.
- Hayward, S. J. See Loeb, L.
- Haywards Heath District Gas Co., and Whitcher, A. E., disposal of gas-works effluents, etc., (P.), B., 891.

- Haywood, C., Stevens, T. O., TeWinkel, H. M., and Schott, M., relative effects of increased carbon dioxide tensions and decreased oxygen tensions on the heart frequency of young trout, A., 1013.
- Haywood, F. W. See Bramley, A.
- Hazard, R., Herbain, M., and Vaille, C., galactosuria test of Piessinger; application of the method of Fleury and Marquo to determination of galactose in urine, A., 270.
- and Lardé, R., comparison of toxicity and general effects of natural and synthetic camphor on guinea-pigs, A., 526.
- and Vaille, C., differentiation and classification, by means of sparteine, of some hyperglycæmias provoked in the rabbit, A., 641.
- and Wurmser, L., antagonism of potassium and magnesium ions in adrenaline secretion, A., 258.
- Hazel, F., and King, G. B., migration studies with colloids. III. Behaviour of gelatin-protected ferric oxide and manganese dioxide sols, A., 821.
- See also Ellison, H. L.
- Hazel-Atlas Glass Co. See Bowman, S. B., and Flint, F. C.
- Hazeley, E. See Courtaulds, Ltd.
- Hazell, E., and Nat. India Rubber Co., rubber thread [from latex], (P.), B., 962.
- Stowe, H. F., and Naugatuck Chem. Co., adhesive, (P.), B., 242.
- Hazelzet, L. J. J., fuel briquettes, (P.), B., 87. Briquette-shaped fuel, (P.), B., 259.
- Hazen, C. R., cadmium is poisonous [for foodstuffs], B., 251.
- Hazen, T. See Zinzow, W. A.
- Hazlehurst, T. H., *jun.*, demonstration of rotating-vibrating diatomic molecules, A., 1342.
- and Kelley, W. H., *jun.*, representation of statistical distributions by continuous spectra, A., 1187.
- and Neville, H. A., new models of old molecules, A., 685.
- Head, C. J., iron sponge, (P.), B., 234.
- Head, G., [moulding] method and apparatus for production of bricks, blocks, tiles, etc., (P.), B., 853.
- Head, R. E., form and occurrence of gold in pyrite from a metallurgical viewpoint—coated gold, B., 953.
- and Thackwell, F. E., floatability of lead and silver jarosites, B., 953.
- Heading, W. R., assay of strong ointment of mercuric nitrate, B., 253. Analysis of some mercurial ointments, B., 253.
- Headlee, T. J., fruits and vegetables; [codling moth sprays], B., 516. Derris as an arsenical substitute on vegetables, B., 1012.
- and Tobacco By-Products & Chem. Corp., nicotine insecticide, (P.), B., 692.
- Heald, F. D. See Baker, K. F.
- Healey, J. See Dunlop Rubber Co.
- Healey, R. H. See Bailey, V. A.
- Health Products Corporation. See Barthen, C. L.
- Healy, J. J., *jun.*, and Merrimac Chem. Co., processing glycerin lyes, (P.), B., 733.
- Heap, M. E. See MacLeod, F. L.
- Heaps, C. W., diffraction of X-rays by liquid Na-K alloy in a magnetic field, A., 1306.
- Heard, J. F. See Tolansky, S.
- Heard, R. D. H., and Welch, A. D., perfusion of adrenal gland with reference to mechanism of adrenaline stabilisation, A., 789.
- Hearn, J. E., Friend's method for determination of chlorides [in blood], A., 1393.
- Hearn, W. L. See Schur, M. O.
- Hearne, G. See Bataafsche Petroleum Maats.
- Heart, W. H., acid value of resin esters, B., 599.
- Heastie, B., heat transfer and food-plant design, B., 129.
- Heat Exchanger Co. See Stamsvik, A. L.
- Heath, A. R. N., and Tapp, T. C., [apparatus for continuous] electroplating [of sheet metal], (P.), B., 910.
- Heath, O. V. S., [nitrate in soils], B., 866.
- Heath, R. L. See Miller, M. O.
- Heath, S. B. See Dow Chem. Co.
- Heath, T. V. See Goode, E. A.
- Heatley, N. G., micro-burette, A., 466.
- Heaton, N. See Stevens, H. P.
- Hebb, C. O. See Dreyer, N. B.
- Hebb, M. H. See Van Vleet, J. H.
- Heberlein & Co. Akt.-Ges., crinkled patterns on] crêpe fabrics, (P.), B., 542. Figured effects on textiles, (P.), B., 898. Processing of vegetable fibrous materials, using ammoniacal cupric oxide solution, (P.), B., 989. [Figured effects in] crêpe fabrics, (P.), B., 989.
- See also Kundert, J. G.
- Hebley, H. F., and Prins, K., dust-extraction apparatus, (P.), B., 755.
- Hecat, E., phosphatides of acid-fast bacteria, A., 1282.
- Hechenbleikner, I., and Chem. Construction Corp., [vacuum] concentration apparatus [for acid], (P.), B., 543. Apparatus for treatment of gaseous products, (P.), B., 883.
- Hecht, E., sterol content of bacteria, especially tubercle bacillus; detection of cholesterol, A., 407. Sterol content of bacteria, *B. coli*, A., 663. Physiological salt solutions and the growth of tissues, A., 672.
- Hecht, F., decomposition of animal substances while embedded in marine sediments, A., 1003.
- and Ehrmann, W., determination of thorium with picrolonic acid, A., 464. Determination of thorium with 8-hydroxyquinoline, A., 464.
- and Kroupa, E., analysis of small amounts of monazite, A., 1216.
- and Reissner, R., micro-determination of copper, A., 837. Micro-determination of bismuth as oxydide, A., 1474.
- Hecht, G., fate of azo-dyes in the organism, A., 119. Distribution of therapeutic and other substances in the organism, A., 394.
- Hecht, I. R. See Kopelevitsch, G. V.
- Hecht, M., McKinney, D. S., and Campbell, E. G., control of evaporating processes, (P.), B., 579.
- Heck, A. F., effect of degree of base saturation of soil on capacity to fix phosphorus, B., 198.
- Hecker, A. E., and Mathieson Alkali Works, Inc., synthetic production of ammonia, (P.), B., 61.
- Hecker, M. See Schmidt, Erich.
- Heckermann, H., preservation and storage of fresh fruit and vegetables, (P.), B., 477. Preservation of [liquid] eggs, (P.), B., 700.
- Heckter, M., radiochemical surface determination for glass, B., 591.
- Heczko, T., precipitation of aluminium with 8-hydroxyquinoline in presence of iron, nickel, cobalt, copper, chromium, and molybdenum, A., 187.
- Hedberg, C. See Stearns, J. C.
- Hedberg, C. W. J., and Research Corp., electrical precipitation [of suspended particles from gases], (P.), B., 30.
- Hede, A., and Cinder Chrome Co., composition for making a building unit, (P.), B., 903.
- Hedenburg, N. A. See Smith, K. K.
- Hedenburg, O. F., and Rex Research Corp., zinc arsenate, (P.), B., 900.
- Hedfield, K. See Scheib, W.
- Hedgepeth, L. L., handling chlorine to avoid trouble, B., 99. [Manufacture and uses of] concentrated calcium hypochlorite, B., 493.
- Hedges, E. S., and Homer, C. E., equilibrium diagrams of binary alloys of tin, A., 1065.
- Hedin, R. See Hedvall, J. A.
- Hedley, N. See Barsky, G.
- Hedlund, I. See Ramberg, L.
- Hédon, L., and Loubatières, A., can glyco-gen accumulate in the liver of a totally depancreatised dog under the influence of an insulin deprived of vagotonising action? A., 1031.
- Hedstrom, O. H., [spraying apparatus for] production of multishade mottled paper, (P.), B., 625.
- Hedvall, J. A., increase of chemical reactivity during phase changes in solid substances, A., 944. Reactivity and catalytic activity of solid substances in transition states, A., 1086.
- and Afzelius, J., light-dark effect, with reference to adsorptive power of phosphors, A., 1055.
- Hedin, R., and Persson, O., ferromagnetic transformation and catalytic activity, A., 153.
- and Pauly, R. W., chemielectric Curie point effect analogous to magnetochemical, A., 922.
- and Sandford, F., effect of ferromagnetic transformation on the catalytic power of nickel for the reaction $2\text{CO} = \text{CO}_2 + \text{C}$, A., 1467.
- and Schiller, G., increased velocity of formation of silicates in powdered mixtures as a result of the loosening of the metal oxide [lattice] and the crystallographic transformation of the quartz, A., 174.
- Heede, A., and Stensig, S., distribution of phenol between olive oil and serum, A., 779.
- Heer, J. See Fichter, F.
- Heertjes, P. M., Claus, G., and Waterman, H. I., determinations of sp. gr. III. Influence of spinning process on sp. gr. and adsorbing power of acetate silk, B., 719.
- Heesterman, J. E., colorimetric determination of salicylic acid, A., 1259.
- Hefter, J. M., rôle of ammonia in the animal organism, A., 654.
- Hegde, B. J., Rao, B. S., and Guha, P. C., Indian coal tar, B., 535.
- Heger, A., Sourtag, A., and Leineweber, M., refractory bricks for the open-hearth furnace, B., 454.
- Heger, O. See Kubelka, V.
- Heggie, R. See Davis, T. L.
- Hegland, J. M. A., titration of barbitals with silver nitrate, B., 286.

- Heiber, E., thermo-electric power of the alkali metals in the solid and liquid state, with respect to platinum, A., 923.
- Heid, J. B. See Universal Oil Products Co.
- Heide, C. von der, calculation of sugar for improvement of musts and wines, B., 779.
- and Burkard, J., residual sugar of wine, B., 425.
- and Zeisset, W., determination of extract in wine, B., 779.
- Heide, L. van der, errors involved in polarisation [of sugar solutions] when other than normal temperature is used, B., 693.
- Heidegger, E. See Seifried, O.
- Heidelberger, M., and Pedersen, K. O., mol. wt. and isoelectric point of thyroglobulin, A., 1522.
- and Svedberg, T., mol. wt. of thyroglobulin, A., 105.
- See also Seegal, D.
- Heidenheimer, A. See Heidenheimer, I.
- Heidenheimer, I., and Heidenheimer, A., [cellulose] filler dressing for fabrics, (P.), B., 542.
- Heidt, L. J., photolysis of dry ozone at λ 208, 254, 280, and 313 μ . II. Reaction kinetics, A., 1330.
- and Forbes, G. S., photolysis of dry ozone at λ 208, 254, and 280 μ . I. Quantum yields, A., 47.
- See also Forbes, G. S.
- Heidtkamp, G. See Engl, J.
- Heiduschka, A., and Philippi, F., solanine, A., 736.
- and Sommer, H., determination of sterols, A., 487. Determination of citric acid in wine, B., 1065.
- Heiðman, J. H. See Held, E. F. M. van der.
- Heil, O. H. See Aluminium, Ltd.
- Heil, W. See Stocker, K.
- Heilbron, I. M., vitamin-A, A., 260.
- Jackson, Harold, and Jones, R. N., lipochromes of sea anemones. I. Carotenoid pigments of *Actinia equina*, *Anemonia sulcata*, *Actinobola dianthus*, and *Tealia felina*, A., 1005.
- Parry, E. G., and Phipers, R. F., [chemistry of] algae. II. Relationship between certain algal constituents. III. Isolation of lactoflavin, A., 1040.
- and Phipers, R. F., [chemistry of] algae. I. Lipochromes of *Fucus vesiculosus*, A., 1040.
- Samant, K. M., and Spring, F. S., ring structure of calciferol, A., 1036.
- and Spring, F. S., chemistry of some irradiation products of ergosterol, A., 1235.
- Spring, F. S., and Stewart, P. A., sterol group. XXI. Lumisterol, A., 1493.
- See also Coffey, D. H., Davies, W. H., Gillam, A. E., and Imperial Chem. Industries.
- Heilbrunn, L. V., action of anaesthetics on living protoplasm, A., 394.
- Heiligenstaedt, W., basis of heat calculations in furnaces, B., 609.
- Heilman, R. H., heat transmission through bare and insulated furnace walls, B., 129.
- and Bradley, R. S., thermal conductivity of refractories under operating conditions, B., 406.
- Heilmann, P., delayed detection of carbon monoxide in the corpse, A., 398.
- Heilmeyer, L., hemoglobin metabolism and its disorders, A., 1517.
- Heilmeyer, L., and Toop, H., clinical colour measurements. XII. Spectrophotometric pigment analysis of blood-serum, with respect to the bilirubin and carotene spectra, A., 103.
- Heim, J. W. See Field, M. E.
- Heim, K., hormones from cases of toxæmias of pregnancy, A., 1174.
- Heim, O., sensitive test for *p*-phenylenediamine, A., 877.
- Heim, R. See Laissus, J.
- Heiman, V., relative vitamin-B₂ contents of dried whey and dried skim-milk, A., 1546.
- Heimann, B., waterproof cement and mortar masses, (P.), B., 675.
- Heimer, A., isotope effect with bismuth hydride (BiH/BiD), A., 805. Band spectrum of bismuth hydride, A., 1051.
- Heimer, T., isotope effect with copper hydride (CuH/CuD), A., 909. Band systems of copper hydride, A., 1051.
- Heimes, F., adhesion of enamel containing cobalt and nickel oxides, B., 405, 850.
- Heimhold, H. See Bergmann, E.
- Hein, F., and Daniel, W., determination of hydrogen with silver permanganate solution, A., 717.
- and Regler, H., optically active silver complexes, A., 868.
- and Schwedler, H., synthesis of 2:2'-dipyridyl from pyridine and ferric chloride and dipyridyl complex salts, A., 759.
- and Wagner, F., 2:4:6-triaminotoluene hydrochloride, A., 613. Preparation of 2:4:6-triaminotoluene and related amines by catalytic hydrogenation, A., 855. Complex compounds of 2:4:6-triaminotoluene, A., 944.
- Hein, M. A. See Snider, H. J.
- Hein, W. See Senfleben, H.
- Heinänen, P., autoxidation of methyl sorbate, A., 731.
- Heindel, R. L., jun. See Dow Chem. Co.
- Heindl, R. A., and Pendergast, W. L., Young's modulus of elasticity at several temperatures for refractories of varying silica content, B., 307.
- Heindlhofer, K., and Larsen, B. M., why do some metals resist oxidation? B., 154.
- Heine & Co., Akt.-Ges., perfumes or perfume mixtures, (P.), B., 839. Condensation products from trihalogeno-esters of fatty acids and esters of levulinic [levulic] acid, (P.), B., 1130.
- Heineke Co., Inc. See Dittmann, T.
- Heineken, W. R., Freed, M. L., and Rufert Chem. Co., metallic [copper and nickel] salts, (P.), B., 270.
- Heineman, R. E. S., petrography of the Roy, Harding County, New Mexico, meteorite, A., 1101.
- Heinemann, B., electric furnace with automatic temperature regulation for semi-micro-determination of carbon and hydrogen (ter Meulen), A., 101.
- Heinen, A., [double-cylinder] apparatus for shrinking fabrics, (P.), B., 670.
- Heinicke, H. M. E. See Western Electric Co.
- Heinisch, E. See Fink, H.
- Heinlein, H., influence of parenteral administration of protein- and non-protein-colloids on blood-proteins, A., 1394.
- Heinrich, F. See Schwarz, R.
- Heinrich, R., and Internat. Precipitation Co., electrical precipitator [for gases], (P.), B., 462. Apparatus for humidifying and cooling dust-laden gases, (P.), B., 482.
- See also Buff, C. T.
- Heinrich Hütte Ges.m.b.H., H., treatment of materials containing lithium phosphate [e.g., amblygonite], (P.), B., 494.
- Heinrichs, M. See Stackelberg, M. von.
- Heinsen, H. A., substances affecting the circulation in "eutonon" liver extract, A., 1156.
- and Wolf, H. J., effect of specific substances of the body on blood-pressure in man. IV. Action of liver preparations (Campolon, Degewop, Hepatrat, and Hepatopson) administered intravenously, A., 1019.
- See also Ackermann, D., and Wolf, H. J.
- Heintz, E. See Vlès, F.
- Heintz, G. See Grube, G.
- Heintz, K. See Schmidt, O. T.
- Heintz, L., calculation of original wort content of beer, B., 519.
- Heinz, W. See Dreyspring, C., and Krügel, C.
- Heinze, R., and Marder, M., determination of octane number of light motor fuels, B., 660. Application of physical constants to determination of ignition behaviour (cetene number) of Diesel fuels, B., 934. Relation between ignition of brown-coal Diesel fuels and their physical properties, B., 1031.
- and Zwergal, A., determination of paraffin in mineral oil products, B., 391.
- Heise, G. W., Brokate, C. W., and Nat. Carbon Co., Inc., galvanic cell and caustic electrolyte therefor, (P.), B., 639.
- Heisenberg, W., Dirac's theory of the positron, A., 139. Structure of light atomic nuclei, A., 1298.
- Heiser, F. See Schnelle, F.
- Heiserich, E., sulphur metabolism of maize and tobacco, A., 553.
- Heisig, G. B., and Davis, H. M., physical constants of dimethylacetylene, A., 470.
- and Heisig, L. K., identification of halides in presence of thiocyanates, A., 1091.
- and Wilson, John L., action of bromine on butadiene, A., 827.
- Heisig, L. K. See Heisig, G. B.
- Heisler, C. L. See Gen. Electric Co.
- Heiss, R., theory of changes in foods caused by freezing, B., 1021.
- Heitler, W., equilibrium of black-body radiation, A., 805.
- and Nordheim, L., probability of multiple processes of very high energies, A., 15.
- Heitmann, M. J., and Patent & Licensing Corp., lubrication of surfaces exposed to a high temperature, (P.), B., 984.
- Heitzmann, P. See Lespiau, R.
- Helberg, E. See Möhler, H.
- Helbig, K., photochemical properties of synthetic rock-salt crystals; red displacement of colouring absorption bands by plastic deformation, A., 19.
- Held, E., and Ponce, K., pure growth effect obtained with heated pregnancy urine, A., 1289.
- Held, E. F. M. van der, effect of air on condensation of water vapour, A., 160.
- and Heiðman, J. H., transition probabilities in the potassium series in flames, A., 271.

- Held, N. A., and Samochvalov, K. N., adsorption of organic substances at crystal surfaces. III. Adsorption of sodium laurate by barium sulphate, A., 1069.
- Helfenstein, A. See Stoll, A.
- Helfer, L., and Mottier, M., new method for fission of methylenedioxy-groups, A., 1492.
- Helferich, B., and Burt, C. P., emulsin. XXIII. Influence of substitution in the benzene nucleus on enzymic fission of phenol- β -*d*-glucosides. II., A., 1536.
- and Günther, E., emulsin. XVIII. Fission of phenol- β -*d*-glucoside 6-methyl ether by almond emulsin, A., 401.
- and Lampert, U., emulsin. XXII. Fission of α -*l*-arabinosides by almond emulsin, A., 1110.
- Lampert, U., and Sparmberg, G., α -glucosidase of yeast, A., 69.
- and Petersen, S. R., emulsin. XIX. Action of ozone on almond-emulsin, A., 783. Synthesis of α -maltosides and their behaviour towards diastase, A., 848.
- and Philipp, F., preparation and enzymic fission of basic glycosides. II., A., 201.
- Scheiber, H. E., Strecek, R., and Vorsatz, F., emulsin. XXI. Influence of substitution in the benzene nucleus of phenol- β -*d*-glucosides on their ease of fission with enzymes, A., 964.
- and Schmitz-Hillebrecht, E., emulsin. XX. Effect of neutral salts on activity of almond-emulsin, A., 1163.
- and Strauss, F., derivatives of phenol- β -*d*-glucoside, A., 330.
- and Vorsatz, F., esters of caffeic acid, A., 489.
- Winkler, S., Schmitz-Hillebrecht, E., and Bach, H., emulsin. XVII. Action of ozone on almond-emulsin, A., 250.
- Hellrich, J., rubber product [from latex], (P.), B., 817.
- Heligren, B. K., preparation of potassium persulphate by electrolysis, B., 1042.
- See also Ilijinski, V. P.
- Hellbach, R. See Herrick, H. T.
- Hellbaum, A. A., gonad-stimulating activity of pituitary glands from horses of different ages and sex types, A., 1424.
- See also Casida, L. E.
- Helle, J. O. F. See Standard Oil Development Co.
- Heller, A., detection of iron, lead, and tar in dust samples, B., 526.
- Heller, G., and Ebeling, R., ring-systems with *para*-linkings. II., A., 974.
- 3-Methylindan-1:2-dione and its oxime; isocoumarin synthesis, A., 980.
- See also Halpern, O.
- Heller, H., insulotropic hormone from intestinal mucosa ("duodenin"). II., A., 411.
- and Grimme, C., classification of some Brazilian palm fats, B., 364.
- See also Slotta, K. H.
- Heller, J., uric acid content of human blood corpuscles, A., 1260.
- and Klisieski, A. J., distribution of precursors of ammonia in sheep's blood, A., 373.
- Heller, P. A., and Jungbluth, H., wall-thickness sensitivity of separately cast cast-iron test-pieces and its relation to the analysis, B., 770.
- Heller, R., determination of bilirubin in animal and human serum, A., 880.
- Heller, V. G. See Long, J. E.
- Heller, W. See Centnerszwer, M.
- Heller, Wilfried, frequency of vibrational and rotational bands and the chemical reactivity of gaseous molecules, A., 281. Spontaneous formation of ordered aggregates in sols containing non-spherical particles, A., 1074.
- Determination of atmospheric ozone by fluorescein, A., 1092.
- and Polanyi, M., reactions of atoms, A., 150.
- Heller, Witali, most economical conditions of fermentation in yeast factories, B., 40.
- Areometric determination of the yeast content of wort, and its application to the separation of yeast in yeast factories, B., 519.
- Hellerman, L., and Garner, R. L., aliphatic diazo-compounds; preparation and rearrangement of diazo- $\beta\beta\beta$ -triphenyl-ethane, A., 338.
- See also Schock, E. D.
- Hellmann, H., approximation method in the problem of many electrons, A., 278.
- Nature of chemical force, A., 1058.
- Polarisation of electron waves by scattering, A., 1294.
- and Jost, W., chemical forces in the light of quantum mechanics, A., 15.
- Hellmers, J. H., and Kohler, R., changes in the refractive index of mixed alumina and silica gels under the influence of water and alkali, A., 932.
- See also Pfeffer, P.
- Hellmich, R. See Grundmann, W.
- Hellmig, E., optical terms calculated with Fermi's statistical potential, A., 676.
- Hellström, H., Burström, D., and Euler, H. von, chemistry of chromosomes. I., A., 1266.
- See also Brandt, K., and Euler, H. von.
- Hellström, G. L. M., chemical pulp, (P.), B., 96.
- Hellthaler, T. See Pungs, W.
- Helluy, J. R. See Simonin, P.
- Hellwege, H. See Hilpert, R. S.
- Helman, R. M. See Palladin, A. V.
- Helman, S. See Doulikin, A.
- Helmer, O. M., relation of secretion of mucus to acidity of gastric juice, A., 512.
- Fouts, P. J., and Zervas, L. G., gastro-intestinal studies. IV. Relation of p_H to the pepsin and rennin content of the gastric juice, A., 1006.
- See also Emerson, C. P., jun.
- Helmers, C. J. See Dover, M. V.
- Helmert, E. See Maschmann, E.
- Helmholtz, H. F. See Osterberg, A. E.
- Helmore, W., and Griffith, A. A., testing of lubricating oils, (P.), B., 538.
- See also Griffith, A. A., and Mardles, E. W. J.
- Helms, W. See Bömer, A.
- Helz, A. W. See De Witt, C. C.
- Hemeon, W. C. L., setting of Portland cement; rates of contraction and of heat evolution, B., 725.
- Hemingway, A., direct reading p_H meter for glass, quinhydrone, and hydrogen electrodes, A., 839.
- Hemingway, J. E. See Rastall, R. H.
- Hemmeler, A., and Angelini, M., disturbance by cations of tests for anions in alkaline solution, A., 317.
- Hemmer, M. L., inversion of emulsions of mineral oils and aqueous solutions, B., 7.
- Hemmi, H. See Meyer, K. H.
- Hemphill, M. G. See Ahmed, N.
- Henderson, C. N. See Setter, L. R.
- Henderson, C. T., walnut bleaching, (P.), B., 380.
- and Kennedy, C. C., treatment of sewage, (P.), B., 752.
- Henderson, E. W., and Milby, T. T., egg-yolk and chicken fat as preventives of rickets and "slipped" tendons of chicks, A., 1403.
- See also Wilcke, H. L.
- Henderson, J., are fishes the principal source of petroleum? A., 600.
- Henderson, Joseph E., two-stage oil diffusion pump, A., 600.
- Henderson, K. See Hamilton, C. C.
- Henderson, L. M., and Atlantic Refining Co., refining of sour hydrocarbon oil, (P.), B., 56.
- Henderson, M. C., Livingston, M. S., and Lawrence, E. O., artificial radioactivity produced by deutron bombardment, A., 1441.
- See also Evans, R. D., Lawrence, E. O., Lewis, G. N., and Livingston, M. S.
- Henderson, N. See Burns, C. M.
- Henderson, R. G., control of downy mildew of tobacco, B., 567.
- Henderson, W. J., upper limits of continuous β -ray spectra of thorium-C and -C', A., 275.
- Mass of the neutrino, A., 804.
- See also Ellis, C. D.
- Henderson, W. N. See Mohler, D. D.
- Hendrick, J., and Welsh, H. D., effect of treatment on composition of grass: Craibstone drain-gauge results, B., 117.
- Hendricks, B. C. See Le Roy, R. H.
- Hendricks, S. B., cholesteryl saecylate, A., 152.
- Orientation of the oxalate group in oxalic acid and some of its salts, A., 1451.
- See also Hilbert, G. E., Jones, E. J., and Markley, K. S.
- Hendricks, W. A., effect of mineral supplements on length of tail and wing feathers in white Leghorn hens, A., 1529.
- Hendry, E. B. See Stewart, C. P.
- Hendry, J. T. See Hopper, I. V.
- Hendrych, F., and Escobar-Bordoy, J., action of simple and complex derivatives of manganese, cobalt, and nickel, A., 781.
- and Klimesch, K., possibility of acute poisoning by iron; comparison with that by manganese, A., 781.
- Hene, E., active carbon, (P.), B., 342.
- Hene, W., pure chromium compounds [sulphate], (P.), B., 147.
- Heng, Y. K., rotatory power of α -phenylethylamine and of its halogen salts, A., 568.
- and Ta, Y., corrosion of aluminium by sodium hydroxide, A., 1084.
- See also Darmais, E.
- Hengstenberg, F. W. O., and Nitralloy Corp., hardening of iron, steel, and cast-iron alloys by nitriding, (P.), B., 106.
- Hengstenberg, J. See Palacios, J.
- Henharen, J. P., solution of rubber for manufacture of paints, varnishes, and similar products and for insulating purposes, (P.), B., 916.
- Medium or base for use in preparation of linoleum, oil-cloth, floor and wall coverings, insulating compositions, etc., (P.), B., 1005.
- Hénin, S., soil structure: influence of certain factors on stability of the structure, B., 740.

- Henke, C. O. See Du Pont de Nemours & Co., E. I.
- Henkel, P., and Klemm, W., magnetochemical investigations. XII. Magnetic behaviour of some volatile fluorides. XIII. Fluorides of copper, nickel, and cobalt, A., 436. Low-temperature densities of WF_6 and OsF_8 ; CF_4 as immersion liquid, A., 437. Vapour pressures of hexafluorides of selenium and tellurium, A., 438.
- Henkel & Co. G.m.b.H., high-molecular thiosulphuric esters and their salts, (P.), B., 13. Treatment of textiles and other fibrous materials, (P.), B., 19. Superfatted soaps, shaving creams, and similar masses, (P.), B., 194. Cosmetic or other toilet preparations, (P.), B., 256. Higher aliphatic *tert.*-alcohols, (P.), B., 262. Higher ethers [of glycerol], (P.), B., 262. Sulphuric acid derivatives of organic sulphur compounds [textile assistants], (P.), B., 263. Higher *tert.*-alcohols, (P.), B., 347. Soap substitutes, (P.), B., 365. Refining of vegetable materials, (P.), B., 477. Soaps, shaving creams, and similar masses, (P.), B., 597. Aqueous liquids for use in textile, fur, and leather industries, (P.), B., 619. Sulphonation products; [wetting, emulsifying, etc., agents], (P.), B., 619. Sulphuric acid derivatives of organic acid amides [textile assistants], (P.), B., 665. Assistants used in treatment of textiles and other fibrous materials, (P.), B., 715. Washing and cleansing agents, etc., (P.), B., 733, 1150. Wetting agents, etc., (P.), B., 847. Dry adhesives, (P.), B., 963.
- Henne, A. L., and Gen. Motors Corp., fluoro-halo[geno]-derivatives of hexachloroethane, (P.), B., 715. Halo-fluoro-hydrocarbons, (P.), B., 839. See also Scott, E. W.
- Henneberg, Walter, field combinations for velocity- and mass-spectrography. III., A., 188.
- Henneberg, Wilhelm. See Heucke, R.
- Hennessey, L. De L., Sahlin, N. A., and Nilssen, R., preservation of perishable products, especially milk, etc., by freezing, (P.), B., 876.
- Hennig, C. T., desulphurising and purifying iron, (P.), B., 906.
- Hennig, T., symbol for *p*₁, A., 189. Thixotropy in suspensions of coarsely disperse aluminium compounds, A., 1074.
- Henning, H. J., absorption of acid by wool, B., 95.
- Hennings, C., association and molecular polarisation, A., 694.
- Hennion, G. F., and Nieuwland, J. A., addition of methyl alcohol to dialkylacetylenes, A., 1480. See also Killian, D. B., and Sowa, F. J.
- Henon, G., practical applications of [moulding] sand tests, B., 26. Self-annealing of quenched iron castings, B., 309. Regulation of cupola furnaces, B., 904.
- Henri, V., carbonyl group of aldehydes and ketones compared with carbon monoxide, A., 10.
- and Angenot, P., ultra-violet absorption spectrum of pyridine, A., 563.
- and Cartwright, C. H., absorption spectrum of benzene at high temperature, A., 805.
- and Lasarev, V., ultra-violet absorption spectrum of methylamine, A., 563. Ultra-violet absorption spectrum of methylamine in the vapour state, A., 1052.
- Henri, V., Weizmann, C., and Hirshberg, Y., photochemical decomposition of glycine; influence of the medium and wavelength, A., 178.
- Henrich, F., mineral occurring in Germany containing rare-earths as main constituent, A., 324.
- Henrich, L. C. See Wilhelmj, C. M.
- Henriksen, A., and Lincoln, B. H., lubricating oils, (P.), B., 261.
- Lincoln, B. H., and Continental Oil Co., lubricating oil, (P.), B., 261. See also Lincoln, B. H.
- Henrion, J., hydrolysis of alkali hydrides and the nature of chemical linking between hydrogen and strongly electropositive metals, A., 713.
- Henriques, V. See Mrak, E.
- Henriquez, P. C., mathematical analysis of the single and double six-ring, A., 15. Dipole apparatus, A., 598. Apparatus for m.-p. determinations and pressure, vapour pressure, and thermoregulators, A., 721. New formula for molecular polarisation and refraction, A., 916. Measurements of dielectric constants, A., 952.
- and Hulst, L. J. N. van der, physical methods in chemistry. I., A., 253. See also Hulst, L. J. N. van der.
- Henry, A. F. X., melanin and melanoferric reactants in solution and in suspensions, A., 656.
- Henry, A. J. See Bassett, H.
- Henry, A. M., removal of residual [insecticide] poisons from fruits and vegetables, (P.), B., 380, 748.
- Henry, B. S., and Partansky, A. M., rate and extent of anaerobic decomposition of [paper pulp] sulphite waste liquor by bacteria of sea-bottom mud. II. Bacteriological, B., 752. See also Rigg, G. B.
- Henry, D. E. See Westinghouse Lamp Co.
- Henry, F. G., self-cleaning continuous filter, (P.), B., 481.
- Henry, H. D., electric batteries, (P.), B., 958.
- Henry, I. W., and Ionizing Corp. of America, electric light and wave apparatus and treatment of hydrocarbons, (P.), B., 295.
- Henry, K. M. See Kon, S. K.
- Henry, L., high-power hydrogen lamp, A., 320. Photochemical decomposition of nitrous oxide and energy of dissociation of nitrogen, A., 590. Mercury-vapour pumps with low primary vacuum, A., 1098. Measurement of low pressures with the elastic manometer, A., 1099.
- Henry, L. A. M., absorption spectrum and mechanism of photochemical decomposition of N_2O , A., 1051.
- Henry, T. A., and Sharp, T. M., 2-iodo-3-hydroxybenzoic acid, A., 975.
- and Solomon, W., modified cinchona alkaloids. I. *apo*Quinine and *apo*quinidine, A., 227. *apo*Quinine, A., 996.
- Solomon, W., and Gibbs, E. M., modified cinchona alkaloids. II. Action of sulphuric acid on quinine and quinidine, A., 1136.
- Henshaw, C. L., conducting films in high vacua, A., 1840.
- Henshaw, D. M. See Holmes & Co., Ltd., W. C.
- Hensill, G. S. See Borden, A. D.
- Hensley, W. A. See Dover, M. I.
- Henson, E. R. See Bakke, A. L.
- Henson, F. C. See Leighton, P. A.
- Henstock, H., potassium ethyl sulphate gels, A., 297.
- Hentrich, W., and Hoermann, F., removal of bitterness from [seeds of] lupins, B., 922.
- Henze, M., "ketol," $OH-CHAc-CH_2Ac$, A., 734. Isomerisation of hydroxyketones; "phenylketol," $COPH-CH(OH)-CH_2-COMe$, A., 753.
- Heou-Feo, T., preparation of alkylquinolines, A., 499. Aminoalkylquinolines, II., A., 499. Aminoalkylpyridines, III., A., 499.
- Hepburn, C. J. See Sadler, S. S.
- Hepburn, G. A. See Ripley, L. B.
- Hepburn, W. M., insulating refractories, B., 356.
- Hephaest, Akt.-Ges. für Motorische Kraft-erzeugung, and Graemiger, B., impact pulverisers, (P.), B., 531.
- Graemiger, B., and Ludin, W., impact comminuting device, (P.), B., 787.
- Hepler, O. E., fat tolerance in hyperthyroidism, A., 1009.
- Hepp, G. See Keil, W.
- Hepting, G. H., blue-stain development in peeled shortleaf and loblolly pine pulpwood, B., 1039.
- Heraeus, Ges.m.b.H., W. C., [points for tipping] gold pens, (P.), B., 638.
- Heraeus Vacuumschmelze Akt.-Ges., refining alloys [containing chromium], (P.), B., 504. Magnetic alloys, (P.), B., 556, 998. Heat-resistant [iron] alloys, (P.), B., 810. Annealing furnace [for strip metal], (P.), B., 998.
- and Rohn, W., metallurgical slag reactions [for refining iron], (P.), B., 956. See also Telegraph Construction & Maintenance Co.
- Herasymenko, P., and Valenta, E., physical chemistry of steel making, B., 854.
- Herb, R. G., Parkinson, D. B., and Kerst, D. W., yield of α -particles from lithium films bombarded by protons, A., 1186.
- Herbain, M. See Hazard, R.
- Herbert, A. M., and Thompson, F. C., use of Hele-Shaw apparatus in the investigation of the flow of metals, B., 1049.
- Herbert, E. G., periodic hardness fluctuations induced in metals by mechanical, thermal, and magnetic disturbances, B., 152.
- Herbert, F. K., blood-fats in diabetic lipaemia, A., 1148.
- Herbert, R. W., and Hirst, E. L., absorption spectra of metabolic acids of *Penicillium Charlesii* and their relationship to absorption of ascorbic acid, A., 1106.
- Hirst, E. L., Samuels, H., and Wood, Charles Edmund, optical rotatory dispersion in carbohydrate group. V. Tetramethyl- γ -gluconolactone, A., 568.
- Herbordt, F. W., output of rotating-heart gas producers in gasification of coke, B., 52.
- Herbsman, A. M., and Industrial Patents, Ltd., treatment of water-in-oil emulsions, (P.), B., 216. Treatment [cutting] of petroleum emulsions, (P.), B., 345.
- Herbst, C. A., and Economy Fuse & Manufg. Co., cold-moulded article, (P.), B., 368.
- Endriz, J. D., and Economy Fuse & Manufg. Co., [resinous] composition adapted for cold-moulding, (P.), B., 1057.

- Herbst, H.**, determination of surface of powders in light of heat of wetting: apparatus for determination of heat of wetting of polished metal surfaces by oil, A., 930. Gas-permeability, compressive strength thermal conductivity, thermal expansion, specific heat, and cracking tendency of refractory stones as related to porosity, B., 674. Improvement of adsorption capacity of wood charcoal, B., 834. New conceptions on chemical elements and reciprocal action between bearing metal and lubricant, B., 954. Prevention of fires and explosions in explosives factories, B., 1024. Influence of breath-resistance of a gas-mask on the working capacity of wearer of the mask, B., 1070.
- Herbst, R. H.**, and **Baumrucker, G. O.**, colorimetric test for renal function using intravenous iodine preparations, A., 238.
- Herbst, R. M.**, and **Engel, L. L.**, reaction between α -ketonic acids and α -amino-acids, A., 82.
- Hercules Glue Co.** See **Littooy, J. F.**
- Hercules Powder Co.**, and **Alexander, H. B.**, ignition composition, (P.), B., 1119.
- Billing, W. M.**, and **Tinsley, J. S.**, production of composition [cellulose butyrate], (P.), B., 720.
- Borglin, J. N.**, refining of rosin, (P.), B., 321.
- and Butts, D. C.**, rosin esters, (P.), B., 961.
- and Byrkit, R. J., jun.**, hydrogenation of resinous compounds, (P.), B., 736.
- and Crater, W. de C.**, blasting cap, (P.), B., 526.
- Hancock, R. S.**, and **Pritchett, L. C.**, [free-flowing] diazodinitrophenol, (P.), B., 176.
- and Humphrey, I. W.**, coating composition, (P.), B., 320. Separation of anethole from pine oil, (P.), B., 878. Refining of rosin, (P.), B., 915.
- and Johnston, A. C.**, drying oil and method of producing it, (P.), B., 814.
- Kennedy, G. F.**, and **Borglin, J. N.**, binding composition [for foundry sand cores], (P.), B., 915.
- and Koch, William**, [chlorinated rubber] coating composition, (P.), B., 195.
- Coating composition**, (P.), B., 278.
- and Lister, D. A.**, refining of rosin, (P.), B., 278.
- and Lorand, E. J.**, fatty acid esters of carbohydrates, (P.), B., 694.
- and Milliken, M. G.**, digestion of nitro-cellulose [to reduce its viscosity], (P.), B., 266.
- and Nash, H. E.**, composition for fuse, igniter charges, etc., (P.), B., 879.
- and Peterson, E. G.**, synthetic resin, (P.), B., 915.
- and Piccard, J.**, flash composition, (P.), B., 383.
- and Pickett, O. A.**, wetting-out agents, (P.), B., 267.
- and Rankin, L. P.**, ozonation products of terpene alcohol, (P.), B., 92.
- and Shapleigh, J. H.**, nitric acid, (P.), B., 452.
- and Smith, L. T.**, separation of components of pine oil, (P.), B., 333.
- and Spurlin, H. M.**, tracing paper, (P.), B., 267. [Bulk] smokeless powder, (P.), B., 383.
- and Wiggam, D. R.**, smokeless [bulk] powder, (P.), B., 383. Smokeless powder, (P.), B., 430.
- Hercus, C. E.**, and **Purves, H. D.**, skin sensitivity to dichromate, A., 781.
- Herfeld, H.**, judging quality of leather, B., 863.
- See also **Stather, F.**
- Herford, G. F. B.**, secretion of diastase and invertase by *Empoasea solana*, De Long (*Rhynchota, Homoptera, Jassidae*), A., 1163.
- Hering, O.** See **Müller, W. J.**
- Heritage, C. C.**, and **Edwards, V. P.**, circulation of liquors and vapours in digesters, (P.), B., 1077.
- Herk, A. W. H. van**, changes in concentration of cozymase, Z-factor, and flavin during germination of peas, A., 1165.
- Herkel, W.** See **Barcroft, J.**
- Herkus, P. J.**, and **White, A. H.**, evaluation of oils for manufacture of carburetted water-gas, B., 259.
- Herling, H.**, effect of calliercin on diuretin hyperglycemia, A., 538.
- Herman, C. R.** See **Taylor, H. A.**
- Herman, D. B.**, diffusion of water through organic insulating materials, B., 507.
- Herman, J.** See **Liévin, O.**
- Herman, J. von**. See **Worschitz, F.**
- Hermance, H. W.** See **Clarke, B. L.**
- Hermann, F.** See **Schroeder, H.**
- Hermann, H.**, **Jourdan, F.**, and **Cornut, P.**, rôle of marrow in production of hyperglycemia following experimental "cerebral" embolism, A., 1009.
- Hermann, L.**, and **Sachs, G.**, crystal orientation in drawn tin vessels, B., 678.
- Hermann, O.**, and **Thermo Electric Co.**, thermoelectric element and thermocouple, (P.), B., 274.
- Hermann, S.**, absorption and fate of insulin following percutaneous application. II, A., 1543.
- and Fodor, N.**, symbiotic production of vitamin-C by acetic bacteria and yeast, A., 670.
- and Kassowitz, H.**, absorption and fate of insulin following percutaneous application. I, A., 1543.
- Hermann, Z.** See **Haurowitz, F.**
- Hermanns, G.** See **Borchers, H.**
- Hermano, A. J.**, and **Eubanas, F.**, treatment of human beri-beri with crystalline vitamin-B₁, A., 1429.
- Hermanowicz, W.**, syringe hydrogen electrode, A., 1097.
- Hermans, P. H.**, mechanism of reactions of diacyl peroxides with other organic substances and their thermal decomposition, A., 1482.
- and Bredée, H. L.**, laws of filtration, B., 881.
- See also **Böeseken, J.**
- Hermany, A. S. E. von**, does glycosuria influence the silicon in pancreas and liver? A., 108.
- Herdon, T. C.**, and **Webb, H. A.**, benzaldehyde electrode, A., 38.
- Hernegger, F.**, determination of decay constant of ionium from number of α -particles emitted, A., 1440.
- Hernych, J.**, equipment for pre-defecation of raw [sugar] juice with milk-of-lime, B., 75.
- Herold, I.**, Japanese lemongrass oil, B., 877.
- Herold, L.**, high porphyrin excretion in the new-born: theory of hæmatogenous nature of icterus neonatorum, A., 885. Porphyrin excretion in hyperemesis gravidarum and its relationship to liver function, A., 1269.
- Herold, L.** See also **Anselmino, K. J.**, and **Carrie, C.**
- Herold, W.**, optical absorption of porphyrins, A., 428. Interpretation of reaction between allylthiocarbimide and piperidine, A., 934. Molecular polarisation and association, A., 1191.
- See also **Grabowsky, O.**, and **Wolf, K. L.**
- Heron, H.**, mineral constituents of brewing waters and their influence in brewing operations, B., 779.
- Heron, S. D.**, **Charlton, G.**, and **Shumaker, R. L.**, spark-plug electrode, (P.), B., 507.
- Herrenschwand, G. von**. See **Kofler, L.**
- Herrick, H. T.**, **Hellbach, R.**, and **May, O. E.**, apparatus for application of submerged mould fermentations under pressure, B., 744. Gluconic acid from sugar, using aerobic technique, B., 1065.
- and May, O. E.**, fermentation as factor in producing organic acids, B., 520.
- See also **Lockwood, L. B.**, and **Ward, G. E.**
- Herrick, W. W.**, and **Riegel Paper Corp.**, wrapping paper [for foodstuffs], (P.), B., 266.
- Herrin, R. C.**, chemical changes in blood and intestinal juice produced by loss of intestinal juice, A., 513.
- Herring, G. E.**, **Dean, F. E.**, and **Assoc. Silver Co.**, protection of silver, etc., from tarnish [during storage], (P.), B., 362.
- Herrington, B. L.**, physico-chemical properties of lactose. II. Factors influencing crystalline habit of lactose. IV. Influence of salts and acids on mutarotation velocity of lactose. V. Influence of other substances on equilibrium rotation of lactose. VI. Solubility of lactose in salt solutions; isolation of a compound of lactose and calcium chloride, A., 200, 330, 577.
- Herrington, L. P.**, influence of ionised air on normal subjects, A., 895.
- Herrmann**. See **Solacolu, T.**
- Herrmann, A.**, protection of wood and plywood against weathering, B., 456. Protective paints for wood and plywood in damp atmospheres, B., 561. Interior protection of wooden milk barrels, B., 746.
- Herrmann, E.**, cement, (P.), B., 456.
- Herrmann, F.**, occurrence of lithium on the earth, A., 190.
- Herrmann, H.** See **Fürth, O.**
- Herrmann, L.**, grading, classifying, and similar screens, (P.), B., 882.
- Herrmann, O.**, and **Du Pont Cellophane Co., Inc.**, method of coating [regenerated cellulose, etc.], (P.), B., 961.
- Herrmann, P.**, asphalt-concrete surfacing for automobile roads, B., 592.
- Herrmann, R.** See **Weidenhagen, R.**
- Herrmann, W.** See **Terres, E.**
- Herrmann, W. O.**, **Haehnel, W.**, and **Chem. Forschungsges.m.b.H.**, resin-like mass, (P.), B., 816.
- Haehnel, W.**, and **Consort. für Elektrochem. Ind. G.m.b.H.**, [alcohol-soluble] pastes of polymerised vinyl esters, (P.), B., 368.
- See also **Eibner, A.**
- Herrmann, Ltd., R.**, and **Wolf, Alan**, asphaltic and bituminous compositions, (P.), B., 538.
- Herrold, R. D.**, gonococcicidal action of mallophen in urine, A., 1170.

- Herron, W. F. See McEllroy, W. S.
- Herroun, E. F., magnetic susceptibilities of anhydrous and hydrated sulphates and double sulphates of magnetic metals: increased susceptibility produced by heating cobalt salts, A., 14.
- Hersberger, A. B. See Dean, R. S.
- Herschdoerfer, S. See Pien, J.
- Herscovici, S. See Ionesco-Matiu, A.
- Hersey, M. D. See Coward, H. F.
- Hersberg, E. B. See Fieser, L. F.
- Herstein, B., when and by whom was alcohol first prepared from ethylene? A., 1343.
- Herszafi, J. See Herszfinkiel, H., and Szperl, L.
- Herszfinkiel, H., and Herszafi, J., possibility of a positron transformation of radium-C, A., 276.
- Roblat, J., and Zyw, M., loss of velocity of neutrons in heavy water, A., 678.
- and Wroneberg, A., radiocolloids, A., 297.
- Hertel, E., unidimensional change of the crystal lattice in passing from veronal to dial, A., 921.
- Becker, Gottfried, and Clever, A., mechanism of chlorination of aliphatic acid chlorides. I. Dark reaction, A., 174.
- and Dressel, J., effect of substituents on reactivity of functional groups, A., 1232.
- and Dumont, E., dipole moment of associated molecules and validity of mass law for association, A., 430.
- Molecular structure and crystal symmetry; fine structure of triethyl 1:3:5-benzenetricarboxylate, A., 921.
- and Frank, H., complex isomerism; formation of crystal nuclei and crystal lattices of complex isomerides; thermochemical studies, A., 293.
- and Holt, H. von, exchange reactions between finely-divided crystalline phases and gases, A., 714.
- and Krüger, E., processes [occurring] on the anode during electrolysis of pterates in non-aqueous solvents, A., 1205.
- and Römer, G. H., structural fine-structure of barium succinate, A., 152.
- See also Kranss, G.
- Herthel, E. C., and Sinclair Refining Co., cracking of hydrocarbons, (P.), B., 217, 663, 892.
- Tift, T. De C., and Sinclair Refining Co., cracking of hydrocarbons, (P.), B., 1035.
- See also Isom, E. W.
- Herty, C. H., cellulose [for rayon] from American pinewood, B., 398.
- Rayon pulp from southern pine, B., 1039.
- and Rasch, R. H., South [American] pine for rayon, B., 666.
- Herty, C. H., jun., effect of deoxidation on some properties of steel, B., 634.
- Hartgen, F. A., Frear, G. L., and Royer, M. B., temperature-viscosity measurements in the systems CaO-SiO_2 and $\text{CaO-SiO}_2\text{-CaF}_2$, A., 158.
- Lightner, M. W., and McBride, D. L., effect of deoxidation on rate of ferrite formation in plain carbon steels, B., 995.
- McBride, D. L., and Hough, S. O., effect of deoxidation on grain size and grain growth in plain carbon steels, B., 995.
- Hertz, G., separation of isotopic mixtures by diffusion in streaming mercury vapour, A., 59.
- Hertzog, E. S., determination of arsenic in coal, B., 612.
- Herviaux, J. See Vincent, V.
- Herwick, R. P. See Kunde, M. M.
- Herz, H., improving consistency of butter in winter, B., 204.
- Herz, L. F., rôle of amidopyrine in aetiology of granulocytopenia with reference to its chemical structure, A., 1017.
- Herz, W., fractionation of cellulose acetate, B., 764.
- Herzberg, G., [calculation of band constants for second positive nitrogen group], A., 675.
- Patat, F., and Spinks, J. W. T., rotation-vibration spectra in the photographic infra-red of molecules with the hydrogen isotope of mass 2. I. The $\text{C}_2\text{H}^3\text{H}^2$ spectrum and the C-C and C-H separation in acetylene, A., 10.
- Patat, F., and Verleger, H., geometrical structure of the N_3H molecule, A., 1193.
- and Spinks, J. W. T., absorption bands of HCN in photographic infra-red, A., 281.
- and Verleger, H., two new bands of CO_2 in the photographic infra-red, A., 1444.
- See also Büttendier, G.
- Herzenberg, J., refining of gasoline, mineral oils, and tar oils, (P.), B., 344.
- Herzenstein, A. See Cherbuliez, E.
- Herzer, F. H., effect of some southern roughages when fed with basic grain mixture on fat contents, flavour, texture, and standing-up properties of southern butter, B., 426.
- Herzfeld, E., simple modification of Nessler colorimetry for determination of total, residual, and polypeptide-nitrogen and of urea, A., 1044.
- See also Mohler, H.
- Herzfeld, K. F., speed of sublimation and condensation, A., 925.
- Kinetic theory of gases. I. Absorption of sound. II. General equations of motion and heat conductivity and their application to gliding and temperature jumps, A., 1197.
- and Mayer, (Miss) M. G., fusion, A., 157.
- Herzfeld-Wuesthoff, F., unique position of physical chemistry in patent law, B., 977.
- Herzog, Alfred, can hamatoprosthetic be regarded as a mixture of oxyhaemin and oxyhaemin anhydride? A., 1391.
- Number of carbon atoms in the prosthetic group of blood-pigment, A., 1392.
- Action of sodium hydroxide on Teichmann's haemin, hamatoprosthetic, and haemoglobin, A., 1392.
- Herzog, Alois, microscopical method for determining the titre [denier] of rayon filaments, B., 764.
- Herzog, E., anodic oxidation and protection of iron and duralumin in salt solutions containing air, B., 28.
- and Chaudron, G., accelerated corrosion tests of iron and duralumin in aerated salt solutions, B., 311.
- See also Portevin, A.
- Herzog, G., large cloud chamber, A., 723.
- Herzog, M. L., device for holding electrodes during electrometric titrations, A., 321.
- Herzog, R. O., diffusion of colloids, A., 444.
- Hesler, W. W. See Brown, G. G.
- Hess, calcium hydroxide process for preparation of Portland cement, B., 592.
- Hess, A. F., and Benjamin, H. R., urinary excretion of vitamin-C, A., 131.
- Hess, B. A. See Rulla, N. V.
- Hess, E. M., and Märzinger, J., modified micro-determination of nitrogen in cereals, B., 250.
- Hess, F. M., coke and distillate, (P.), B., 537.
- Hess, J. H., blood-cholesterol and creatinine excretion in urine as aids to diagnosis and treatment of hypothyroidism, A., 650.
- Poncher, H. G., and Woodward, J., factors influencing utilisation of cow's milk, A., 884.
- Hess, K., Abel, G., Schön, W., and Komarewsky, W., preparation of trimethylcellulose, A., 1356.
- and Dziengel, K., cellulose. LIV. Acetolysis of cellulose. VI. Cellotriose and its derivatives, A., 1226.
- and Eveking, W., synthesis of derivatives of glucose 2:3:6-tri-*p*-toluenesulphonate and their identification with the sugars obtained by fission of tri-*p*-toluenesulphonyl- and iododi-*p*-toluenesulphonyl-starch, A., 68.
- and Neumann, F., demethylation of methyl sugars, A., 1107.
- Synthetic sugar anhydrides. VIII. 2:3:6-Tri-methyl-*D*-idose anhydride from 2:3:6-trimethylglucose, A., 1109.
- and Philippoff, W., dependence of viscosity of cellulose esters on the concentration, A., 822.
- and Stenzel, H., differentiating behaviour of α - and β -methylglucoside towards *p*-toluenesulphonyl chloride and pyridine, A., 847.
- and Trogus, C., application of X-rays in the investigation of cellulose and its derivatives, with special reference to reaction mechanism, A., 922.
- Ammonia-cellulose, A., 1486.
- Trogus, C., and Abel, G., fusion of methylcellulose. II. Characterisation of methylcellulose, A., 1356.
- and Ulmann, M., osmometric investigation of dilute solutions of polymeric carbohydrates. VI. Mol. wt. of crystalline cellulose acetates. II., A., 201.
- See also Abel, G., and Trogus, C.
- Hess, L. See Deuts. Gold- & Silberscheideanstalt vorm. Roessler.
- Hess, M., chemical principles of the Viale reaction, A., 1422.
- Hess, W. C., and Sullivan, M. X., determination of cystine and cysteine in butyl alcohol extracts, A., 332.
- Hesse, A., application of enzymes to industrial purposes, B., 40.
- Hesse, E., Meissner, G., Sebelin, M., and Müller, Hermann, chemotherapy of tuberculosis. V. Ethyl sillicyricoleate, A., 1528.
- Hesse, F. M., sugar plastics and by-products, B., 562.
- Hesse, G. See Wieland, H.
- Hesselberger, W., treatment of [raw] skins, pelts, hides, and leathers, (P.), B., 371.
- Hessen, R. See Nowack A.-G., A.
- Hessenland, M., obtaining resin from German forests by a new process, B., 1103.
- Hester, J. B., influence of soil acidity on relative availability of plant nutrients and crop yields in three coastal plain soils, B., 117.
- Amphoteric nature of three Coastal Plain soils. I. In relation to plant growth. II. In relation to leaching and absorption of soil constituents by plants, B., 471.
- See also Parker, M. M.

- Hesthal, C. E. See Allen, J. S. V.
- Hestnes, H., waterproof compound paper, cardboard, etc., (P.), B., 223.
- Hestnes, J., wet process for copper; direct preparation of electrolytic copper from flotation concentrates, B., 1146.
- Hetherington, A. C. See Imperial Chem. Industries.
- Hetterschij, C. W. G. See De Vries, O.
- Hettich, A., structure determination by the Fourier method, A., 150. Technique of structure determination, A., 1193.
- Hettner, G., Pohlman, R., and Schumacher, H. J., infra-red spectrum of fluorine oxide, F_2O , A., 428. Infra-red spectrum of fluorine monoxide, A., 1300.
- Hetzer, J., rate of saponification of fats and its significance in determination of saponification value and of free alkali in soaps, B., 731. Filter-cloths for the oil and fat industry, B., 1135.
- Hetzler, C. W., Boreman, R. W., and Burns, K., spectrum of the zinc arc in a vacuum, A., 1437.
- Heubaum, U., and Illinois University, [electrolytic acidification] treatment of plant juices, (P.), B., 970.
See also Wiberg, E.
- Heublum, R., sulphurised oils and their preparation, B., 237. Extraction of oil from maize germs by pressing and by extraction, B., 639. Extraction [of oil seeds] in [Russian] practice, B., 1054.
- Heubner, W., and Hückel, R., [rate of oxalate in] oxalate-poisoned dogs, A., 1160.
- Heucke, R., and Henneberg, Wilhelm, detection of volutin in living yeast cells by neutral-red, A., 534.
- Heuckeroth, A. W. van, lacquer raw materials, B., 160.
- Heuer, W. See Staudinger, H.
- Heukelekian, H., effect of aeration on rate of oxidation of activated [sewage] sludge mixtures, B., 80. Biochemical changes in formation of activated [sewage] sludge, B., 926. Effect of varying the daily charge of sewage solids on the activated-sludge process, B., 926. Purification of sewage by aeration, B., 927.
and Dorr Co., sewage treatment, (P.), B., 384.
See also Gehm, H. W., and Rudolfs, W.
- Heukers, R. T. See Münch, A. P. W.
- Heukeshoven, W. See Blanck, E.
- Heun, H. See Wendt, A.
- Hauptke, W., [digestion of] bread, A., 1529.
- Heuser, G. F. See Norris, L. C., and Wilgus, H. S., jun.
- Heuser, H., coffee, (P.), B., 173.
- Heusler, F. See Isabellen-Hütte G.m.b.H.
- Heusser, M., mould for castings of iron and non-ferrous metals, (P.), B., 461.
- Hevesi, A., casein in [finishes for] leather manufacture, B., 323, 914.
- Hevesy, G. von, natural and artificial radioactivity of potassium, A., 276. Heavy hydrogen in biology, A., 1551. and Dullenkopf, W., zirconium and hafnium tetrafluorides, A., 180. [Radioactive] transformation of potassium, A., 191. and Hofer, E., elimination of water from the human body, A., 246. and Levi, H., radiopotassium and other artificial radioelements, A., 678. Artificial radioactivity of dysprosium and other rare-earth elements, A., 1050.
- Hevesy, G. von, and Somiya, T., platinum-black, A., 52.
See also Chiewitz, O.
- Hewett, C. L. See Barry, G., Cohen, A., and Cook, James Wilfred.
- Hewitt, C. H. See O'Shaughnessy, F. R.
- Hewitt, E. A. See Greenwood, D. A.
- Hewitt, J. See Thomas, E. N. M.
- Hewitt, L. F., chemistry of anti-bodies and serum-proteins. I. Nitrogen distribution and amino-acids. II. Protein-carbohydrate groups, A., 256, 510.
- Hewson, G. W., and Rees, R. L., determination of dissolved oxygen in de-aerated water by Winkler's method, B., 832.
- Hext, A. R. See Reynolds, W. E.
- Hey, A. See Köhler, E.
- Hey, D. H., amphoteric aromatic substitution. II. Reactions of benzoyl peroxide and benzeneazotriphenylmethane, A., 207. Action of aromatic aldehydes on benzene and toluene in presence of aluminium chloride, A., 344.
See also Grieve, W. S. M.
- Hey, E., [metallic] composition [of copper-tin alloy], (P.), B., 273.
- Hey, G. L., and Massee, A. M., effect of various gas mixtures of known composition on tortrix larvae in store, B., 1013.
Massee, A. M., and Steer, W., control of apple-blossom weevil [*Anthonomus pomorum* (L.) Curt.] by means of a derris dust, B., 1013.
and Steer, W., control of apple sawfly [*Hoplocampa testudinea*, Klug], B., 1013.
- Hey, M. H., apparatus for determination of carbon dioxide, A., 952. Interpretation of dissociation pressures of the palladium-hydrogen system, A., 1322. Zeolites. VIII. Theory of vapour pressure of zeolites, and of diffusion of water or gases in a zeolite crystal, A., 1345.
See also Bannister, F. A.
- Heyden, T., most suitable form of Bessemer converter, B., 309.
- Heydenburg, N. P., Paschen-Back effect and polarisation of resonance radiation; sodium ($5^2P_{1/2, 3/2} - 3^2S_{1/2}$), A., 1. Nuclear magnetic moment of caesium from polarisation of resonance radiation, A., 3. Influence of the Stark effect on fine structure of the Balmer lines of hydrogen, A., 135.
- Heyes, J., quantitative spectrum analysis of gas mixtures, A., 462.
See also Jansen, W. H.
- Heyes, R. G., and Robertson, A., synthesis of rotenone and its derivatives. V. Constitution of apotociccarol, A., 868.
- Heyfetz, P. A. See Giršavičius, J. O.
- Heyl, F. W. See Larsen, D.
- Heyl, G. E., transporting and using highly compressed carbon dioxide in a solid form, (P.), B., 148.
- Heyl, J. G., thyrotropic effect of anterior pituitary preparations, A., 667. and Laqueur, E., determination of thyrotropic action of anterior pituitary preparation and the unit of the hormone, A., 1284.
- Heyl, L. H., and Federal Foundry Supply Co., parting compound; [mould dressing], (P.), B., 899.
- Heyman, A. W., rotary internally-fired kiln, (P.), B., 2.
- Heyman, I. W. See Whiteley, J. T.
- Heymann, E., sol-gel transformations. I. Inverse sol-gel transformation of methylcellulose in water, A., 822.
See also Farquharson, J.
- Heymann, K. See Wieland, H.
- Heyn, M. See Biltz, H.
- Heyne, G. See Ulich, H.
- Heyne, W., cooling arrangement for saponification value determinations, B., 509.
- Heyningen, W. E. van, inhibition of respiration by cyanide, A., 1276.
See also Needham, D. M.
- Heyns, K. See Abderhalden, E., and Dalmer, O.
- Heyroth, F. F., and Looftbourow, J. R., relation of substances of the cell nucleus to lethal action of ultra-violet light, A., 120. Lethal action of radiant energy on living cells, A., 1414. Ultra-violet absorption spectra of certain compounds derived from living cells, A., 1444.
- Heyrovský, J., sensitive polarographic test for absence of rhenium in manganous salts, A., 838.
and Ilkovic, D., polarographic studies with the dropping mercury electrode. II. Absolute determination of reduction and depolarisation potentials, A., 936. Significance of depolarisation potentials deduced from the current-voltage curves in electrolysis with a dropping mercury electrode, A., 1325. and Müller, O. H., polarographic studies with the dropping mercury cathode. XLVIII. Overpotential in heavy water, A., 1079.
- Heyward, F., and Barquette, R. M., effect of frequent fires on chemical composition of forest soils in longleaf pine region, B., 37.
- Heywood, (Mrs.) H. See under Weaver, F. D.
- Hibbard, J. S., and Wangenstein, O. H., character of gaseous distension in mechanical obstruction of the small intestine, A., 384.
- Hibbard, P. L., micro-determination of zinc, A., 54. Chemical methods for determining availability of soil-phosphorus, B., 372. Factors influencing phosphate fixation in soils, B., 688.
See also Chandler, W. H.
- Hibbard, W. R., Candee, E. T., and Amer. Brass Co., refining of hard tin, (P.), B., 1000.
- Hibbert, H. See Buckland, I. K., Brauns, F., Gray, K. R., King, E. G., Marshall, H. B., and Plungian, M.
- Hibi, K., calcium cyanamide, (P.), B., 61.
- Hibino, T., protein. XIII. Proteins of soya bean, A., 268.
See also Komatsu, S.
- Hickey, H. A., permanent or fixed gases from fuel oils, (P.), B., 538.
- Hickinbottom, W. J., rearrangement of alkylanilines. VI. Mechanism of rearrangement, A., 76. Reactions of unsaturated compounds. III. Addition of arylamines to butadiene. IV. Addition of aniline to olefines, A., 205, 1488.
- Hickling, A. See Glasstone, S.
- Hickman, K. C. D. See Eastman Kodak Co.
- Hickman, R. W., investigation of an alternating-current [bridge] method of determining critical potentials [in a vapour], A., 1341.
- Hickmans, E. M., and Smallwood, W. C., cystinuria in two sisters, A., 515.

- Hicks, C. S., and Holden, H. F., ultra-violet absorption spectra of certain denatured proteins, A., 101.
See also Späth, E.
- Hida, T., starch formation in moulds, A., 1166.
- Hidnert, P., thermal expansion of mono- and poly-crystalline antimony, A., 925.
See also Souder, W.
- Hieber, W., and Mühlbauer, F., metal carbonyls. XXII. Reactions and derivatives of the hexacarbonyls of chromium and molybdenum, A., 314.
and Romberg, E., metal carbonyls. XX. Metal hexacarbonyls of the chromium group, their mode of formation and reaction mechanism. XXI. Thermochemical investigations of metal hexacarbonyls. XXIII. Derivatives of tungsten hexacarbonyl, A., 314.
- Hiedemann, E., measurement of the elastic constant of isotropic transparent solids, A., 1219. Precision determinations of elastic constants of isotropic transparent solid substances, A., 1312.
and Hoesch, K. H., standing ultrasonic waves rendered visible in transparent solid substances. II. Optical investigations with a block of glass, A., 1312.
See also Bachem, C.
- Hieger, I. See Barry, G.
- Hientzsch, B. See Fingerling, G.
- Hiers, G. O., and Rose, G. H., lead in building and construction, B., 1098.
- Higasi, K., polarity of chemical compounds. VIII., A., 568.
See also Mizushima, S.
- Higginbottom, A., and Short, W. F., α -naphthylacetic acid, A., 81.
- Higginbottom, C. See Challenger, F.
- Higgins, E. C., jun., and Gardner, F. T., refining of petroleum products, (P.), B., 892. Revivification of brucite or magnesium hydroxide, (P.), B., 900.
- Higgins, G. See Gaunt, W. E.
- Higgins, G. M. See Goodwin, T. W., Lemon, W. S., and Stuart, H. A.
- Higgins, R. See Edwards, C. A.
- Higginson, G. S., and Vredenburg, J. C., apparatus for aerating liquids, (P.), B., 611.
- Higgs, P. G., utilisation of paraffin wax and petroleum ceresin, B., 342.
- High Duty Alloys, Ltd. See Armstrong-Siddeley Motors.
- Highburger, J. H., and Moore, E. K., grease stains on leather. VI. Movement of lipins in heavy leather during drying, B., 1008.
and Thayer, F. D., simple cell for glass electrode work, A., 1097.
See also Koppenhoeff, R., and Moore, E. K.
- Highfield, W. E., protection of steelwork by paint, B., 319.
- Hightower, J. V., refining lubricating oils by solvent extraction, B., 536.
- Higinbotham, H., colloidal graphite as an adjunct lubricant for automobile engines, B., 791.
- Higman, B. See McKay, H. A. C.
- Hignett, A. J., and Kay, F. W., preparation of phenylacetone nitriles from aromatic aldehydes, A., 617.
- Higson, J. E. See Waltman, B. B.
- Higuti, I., sorption of gases by titania gel. I. Relation between condition of preparation and sorptive power of the gel, A., 1315.
- Hikosaka, T., quantum levels of neutrons in the nucleus, A., 1187.
- Hilbert, G. E., Jansen, E. F., and Hendricks, S. B., action of alkali on 2:4-diethoxypyrimidine; synthesis of cytosine; refractive indices of some pyrimidines, A., 629.
- Wulf, O. R., Hendricks, S. B., and Liddel, U., spectroscopic method for detecting some forms of chelation, A., 563.
See also Pinck, L. A.
- Hildebrand, E. M., and Phillips, E. F., effect of certain bactericides, especially copper sulphate, on longevity of honey bees, A., 1413.
- Hildebrand, F. C. See Caldwell, M. L.
- Hildebrand, J. H., solubility. XIV. Experimental tests of a general equation for solubility, A., 818.
and Wood, S. E., complex formation due to polarisation, A., 35.
- Hildebrandt, F., constructional materials for chemical apparatus; possible uses of non-metals, B., 705.
- Hildebrandt, G., Klavehn, W., and Bilhuber, Inc., E., 1-1-phenyl-2-methylaminopropanol-1 [β -methylamino- α -phenylpropyl alcohol], (P.), B., 262.
- Hildebrandt, W., metal-thread effects in rayon knitted goods, B., 800.
- Hilditch, T. P., the fats, B., 317. Chemical structure of fats in relation to their digestibility and palatability, B., 596.
and Paul, H., rate of formation of fully-saturated glycerides during hydrogenation of different natural fats, B., 1053. Component fatty acids and glycerides of partly-hydrogenated rape oil, B., 1054.
and Rigg, J. G., component glycerides of piqui-a-fats, B., 559.
and Smith, C. J., condensation of 2:6-dimethylol-*p*-cresol with esters of higher fatty acids, A., 746.
and Stainsby, W. J., body-fats of the pig. IV. Progressive hydrogenation as an aid in the study of glyceride structure, A., 233. Component glycerides of hen body-fats, A., 645.
See also Banks, A., and Green, T. G.
- Hileman, J. L., and Courtney, E., seasonal variations in lipase content of milk, A., 1147.
- Hilferding, K. See Abel, E.
- Hilgendorff, H. J., absorption spectra of hydrogen cyanide, hydrazine, ethylene, and ammonia in the Schumann region, and of hydrazine in the quartz ultra-violet, A., 1188.
- Hilger, Ltd., A., and Pineo, O. W., spectrophotometric analysis and prediction, (P.), B., 926.
- Hilgert, R., comparison measurements of cosmic and γ -rays with ionisation chambers and counter tubes, A., 559.
- Hill, Arthur. See Imperial Chem. Industries.
- Hill, Audrey, fertiliser trials on lawns at Craibstone, B., 117.
- Hill, A. E., and Fitzgerald, T. B., compounds of sulphur dioxide with various amines, A., 447.
and Yanick, N. S., ternary systems. XX. Calcium sulphate, ammonium sulphate, and water, A., 704.
- Hill, A. J. See Bachman, G. B., and Lindwall, H. G.
- Hill, A. V. See Angell, H. R.
- Hill, Archibald V., heat production of muscle and nerve, A., 779.
- Hill, C. A., and Powell, A. D., loss of phenol from phenol lozenges, B., 252.
- Hill, C. F. See Warren, B. E.
- Hill, D. M., principal expansion coefficients of single crystals of mercury, A., 1454.
See also Winchester, G.
- Hill, D. W., reactions of *o*-hydroxybenzylidenediacetophenones. II. Conversion into pyrylium and benzopyrylium salts. IV. Unsymmetrical 1:5-diketones, A., 354, 1377.
and Melhuish, R. R., reactions of *o*-hydroxybenzylidenediacetophenones. III. Formation of a 4-phenacylideneclavene during the preparation of 4-methoxyflavylum chloride, A., 354. Structure of flavylum salts, A., 1247.
See also Gomm, A. S.
- Hill, E. L., statistics of electron interaction, A., 1294.
- Hill, E. S., and Lacey, W. N., rate of dissolution of methane in quiescent liquid hydrocarbons. II., B., 218. Rate of solution of propane in quiescent liquid hydrocarbons, B., 218.
- Hill, F. B. See Brit. Celanese.
- Hill, F. C. See Wilhelmj, C. M.
- Hill, G. A., Mattacotti, V., and Graham, W. D., toxic principle of poison ivy, A., 246.
- Hill, G. R., jun. See Thomas, M. D.
- Hill, Harry, hyperfine structure in silver, A., 1183.
- Hill, Hinson, Davis, M. B., and Johnson, F. B., nutritional studies with chrysanthemums, B., 326.
- Hill, H. H. See Polhamus, L. G.
- Hill, H. P., alcoholic beverages from citrus fruits, B., 284.
- Hill, J. W., polymerisation and ring-formation. XXVII. Polydecamethylene oxide, A., 1104.
and Carothers, W. H., polymerisation and ring-formation. XXIV. Cyclic and polymeric formals, A., 844.
- Hill, K., lucerne emulsin, A., 250.
- Hill, N. W. See Needham, L. W.
- Hill, O. J., vitamin-D in nutrition of calves, A., 1430.
See also Coulter, S. T.
- Hill, P., and Short, W. F., hydrolytic fission of aromatic ketones by acids, A., 1242.
- Hill, R. See Imperial Chem. Industries.
- Hill, R. B., and Brown Co., [cellulosic] composition [filler for rubber], (P.), B., 1090.
- Hill, R. L., and Atlas Powder Co., commercial blasting explosive, (P.), B., 1167.
- Hill, R. P. See Wolf, R. B.
- Hill, S. E., and Osterhout, W. J. V., mechanical restoration of irritability and of potassium effect, A., 1038.
See also Osterhout, W. J. V.
- Hill, S. G. See Gas Light & Coke Co., and Griffith, R. H.
- Hill, T. G. See Haas, P.
- Hill, T. J., relative efficiencies of germicidal [dental] cements, A., 537.
- Hill, W. L., and Beeson, K. C., composition and properties of superphosphate. II. Free acid in superphosphate, B., 723.
See also Whittaker, C. W.
- Hillabold, H. O. See Beatty, H. O.
- Hille, E. See Alten, F.
- Hillemann, H., identity of 3'-methyl-1:2-cyclopentenophenanthrene with Diels' hydrocarbon, $C_{15}H_{10}$, A., 335.
- Hiller, A. See Van Slyke, D. D.

- Hiller, N. H., Roe, A., and Carbondale Machine Co., filter-press, (P.), B., 754.
- Hiller, T., study of opaque minerals by the method of imprints; improvements in the technique of electrolytic attack, A., 1478. Examination of linnacites of N. Rhodesia and Katanga by the method of imprints, A., 1478.
- See also Wenger, P.
- Hilliers, C. E., and Blue Ridge Slate Corp., coloured silicate granule for roofing, (P.), B., 1144.
- Hillig, F., unified method for determination of fat in foods, with special reference to evaluation of their butter fat content, B., 1019.
- Hillis, D. M., treatment of hydrocarbons, (P.), B., 294.
- Hillman, A. G., Johnson, G. H., and Colourgrave, Ltd., kinematographic effects in colour, (P.), B., 1024.
- Hills, G. M. See Dodds, E. C.
- Hills, R. C., comparison of wet methods used for fineness test of sands and clays, B., 851.
- Hillyer, E. B. See Carter, W. K.
- Hillyer, J. C. See Lincoln, A. T.
- Hillyers, K. A., containers for storage batteries, electric accumulators, and secondary cells, (P.), B., 683.
- Hilpert, R. S., and Hellwage, H., beechwood lignin, a reaction product of carbohydrates in determination of lignin, A., 550.
- and Littmann, E., determination of lignin at low temperatures and complete hydrolysis of straw, A., 344.
- and Peters, O., direct transformation of the skeleton substance of straw into an acetylated carbohydrate, A., 1227.
- and Wagner, R., apparent lignin and skeleton substance of the leaves of plants, A., 550.
- Hilseh, R., and Pohl, R. W., photochemistry of alkali halide crystals, A., 9. Photochemical elementary process in alkali halide crystals, A., 808.
- Hiltehaus, H., pathologico-anatomical conditions in arsine poisoning, A., 1022.
- Hiltner, W., simple pointer instrument for p_H measurements, A., 58.
- and Gittel, W., systematic procedure for potentiometric analysis. I. General principles. II. Determination of Ag, Bi, Pb, Cu, Cd. III. Separation and determination of mercury, A., 55, 185, 720.
- and Seidel, L., quantitative analysis of new-silver, nickelin, constantan, and similar alloys, with special reference to potentiometric methods, B., 730.
- Himmat, M. A., composition of Egyptian linseed oil, B., 1054.
- Himmelfarb, D. See Moskowitz, S.
- Himsworth, H. P., influence of diet on sugar-tolerance of healthy men and its reference to certain extrinsic factors, A., 1404.
- Himwich, H. E., Fazikas, J. F., Barker, S. B., and Hurlburt, M. H., metabolism of tissues excised from adrenalectomised rats, A., 777.
- Fazikas, J. F., Nahum, L. H., Du Bois, D., and Gilman, A., diabetic hyperpyrexia, A., 516.
- Goldfarb, W., Rakieten, N., Nahum, L. H., and Du Bois, D., respiratory quotient of muscle of depancreatised dogs, A., 777.
- Himwich, H. E. See also Brockett, S. H., Chambers, W. H., and Rakieten, N.
- Hinchy, V. M., means for utilisation of waste molasses; production of yeast on sugar esters, B., 1015.
- Hinck, C. F., jun. See Soyenko, B. C.
- Hinckley, W. T., recent trends in [soda-pulp] black-liquor evaporator design, B., 222.
- Hind, H. L. See Hopkins, R. H.
- Hind, S. R., design of main flues and stacks for continuous ceramic kilns, B., 355.
- [with Dale, A. J.], frothed clays, B., 356.
- Hinde & Dauch Paper Co. See Drewsen, P.
- Hindmarch, E. See Scottish Gas Utilities Corp.
- Hines, H. M., and Knowlton, G. C., rôle of the nervous system in the regulation of glycogen metabolism of skeletal muscle, A., 1408.
- Hinglais, H., and Hinglais, M., biological assay of folliculin, A., 259.
- Hinglais, M. See Hinglais, H.
- Hinkel, L. E., Ayling, E. E., and Beynon, J. H., hydrogen cyanide. V. Reactions of iminoformylcarbylamine, A., 966. N-Benzhydryl-N'-arylformamides, A., 1231.
- Ayling, E. E., and Dippy, J. F. J., substituted phenyldihydroresorcinols, A., 744.
- Ayling, E. E., and Morgan, W. H., substituted aromatic aldehydes in Hantzsch's pyridine condensation. IV. Derivatives of 3:4-dihydroxybenzaldehyde, A., 989.
- Ayling, E. E., and Walters, T. M., dichloro-o-xylenes. II., A., 204.
- Hinks, E. See Moir, D. D.
- Hino, M., effects of some narcotics on sedimentation of red blood-cells, A., 525.
- Hinonishi, S. See Kobayashi, K.
- Hinrichs, W. J. H., moisture- and airtight coatings, (P.), B., 1056. Preservation of fruit, (P.), B., 1067.
- Hinrichsen, E. See Gaudio, V.
- Hinsberg, O., γ -trimethylene trisulphide perchlorate. II., A., 471.
- Hinselmann, Koksofenbauges. m.b.H., by-product production in coke ovens, (P.), B., 981.
- Hinsey, J. C. See Davis, B. L., jun.
- Hinshaw, W. R., and Lloyd, W. E., vitamin-A deficiency in turkeys, A., 543.
- Hinshelwood, C. N., thermal decomposition of acetaldehyde, A., 172. Reaction of hydrogen chloride with methyl alcohol, A., 828. Mechanism of chemical reactions, A., 1206. Quantum mechanics and kinetics of reactions in organic chemistry, A., 1463.
- and Legard, A. R., factors determining velocity of reactions in solution; molecular statistics of the esterification of carboxylic acids, A., 828.
- Williamson, A. T., and Wolfenden, J. H., reaction between oxygen and the heavier isotope of hydrogen, A., 39.
- See also Fletcher, C. J. M., Williamson, A. T., and Winkler, C. A.
- Hinsley, J. F. See Brewer, S. R.
- Hinton, J. C., maturity of fruit. IV. Catalase and oxidase activities of apples in storage as affected by conditions obtaining during growth, B., 826.
- Hinton, J. C., maturity of fruit. V. Effect of conditions during growth on progress of softening and on loss of total weight in apples during storage. VI. Effect of conditions during growth on some chemical constituents of apples in storage, B., 826.
- Hintzelmann, U., assay of *Allium* preparations, A., 1019.
- Hippel, A. von, ultra-violet absorption spectra of alkali halide crystals, A., 280.
- Hippensteel, C. L., galvanic and electrolytic corrosion; report of Sub-Committee VII (B-3), B., 1048.
- Hipple, J. A., jun. See Selwood, P. W.
- Hipple, J. S., expansion joint filling material, (P.), B., 1077.
- Hirade, J., kinetics of reaction between oxyhalogen and halogen acids, A., 709.
- Hiraiwa, I., Yamafuji, K., and Yonezawa, Y., action of sulphur-containing gases on cocoons of *Bombyx mori*, L., A., 1022.
- See also Yamafuji, K.
- Hiraiwa, M. See Asahina, Y.
- Hirakoso, K., influence of hydrogen and oxygen on critical voltage phenomena at the critical current density of spongy copper deposition, B., 679.
- Hirano, Shigeru, determination of urushiol in lacquer. I. Titration with $\text{Ba}(\text{OH})_2$, using phenolphthalein as indicator. II. Titration with $\text{Ba}(\text{OH})_2$, the proper-colour reaction being used as indicator. III.—VI. VII. Structure of substance produced from urushiol by oxidation or polymerisation, A., 1502; B., 734, 960.
- Hirano, Shiro. See Ogata, A.
- Hirano, Shizo, determination of gold by photometric titration with potassium iodide, A., 56. Determination of silver by photometric titration, A., 185. Determination of chloride, bromide, and iodide by photometric titration, A., 1091.
- Hirano, Y. See Sobue, H.
- Hirao, S. See Suzuki, U.
- Hirashima, K., influence of mercury on cultivated tissue. I. Influence of mercuric chloride, bromide, cyanide, and oxycyanide on growth and morphological picture of fibroblast *in vitro*; influence of neptal, salyrgan, novasurol, and imamilcol, A., 1413.
- Hirata, F., and Daimon, T., influence of temperature on viscosity of a very syrupy and concentrated solution of a lyophilic colloid [cellulose nitrate], A., 163.
- Hirata, H., and Tanaka, Y., crystalline structure of electrolytic white tin, A., 920.
- Tanaka, Y., and Komatsubara, H., arrangements of micro-crystals in lead deposited by electrolysis, A., 1330.
- Hirone, T., problems on theory of ferromagnetism, A., 435. Theory of electrical resistance anomaly of ferromagnetic substances, A., 1062. Diamagnetism of the Thomas-Fermi ion, A., 1197.
- Hiroi, K., relation between presence of anthocyanin colours and assimilative capacity of some cultivated plants. IV., A., 548.
- Hirsch, A. See Elledge, H. G.
- Hirsch, A. (Heidelberg). See Kautsky, H.
- Hirsch, H., experimental hyperglycemia in individuals of different physical character; individual variations; variation in blood-sugar following injections of insulin and adrenaline, A., 641.

- Hirsch, P. See Straub, J.
- Hirsch, P. A., pulverising machine, (P.), B., 3.
- Hirsch, R. von, temperature and entropy of light quanta, A., 679.
- Hirschfelder, J. O., polarisability and related properties of molecular hydrogen and the diatomic hydrogen ion, A., 1298.
- Hirschlaff, E. See Duschinsky, F.
- Hirschmann, H. See Rupe, H.
- Hirshberg, Y. See Henri, V.
- Hirshfeld, C. F., apparatus for dust separation, (P.), B., 84.
- Hirst, A. A., [pneumatically operated] washer boxes for treating coal or other granular substances, (P.), B., 481.
- Hirst, F. L. See Ault, R. G., Baird, D. K., Harris, T. L., Haworth, W. N., and Herbert, R. W.
- Hirst, H., and Alexander, E., intensity ratios of the fluorescent X-ray emission lines in the L region and their dependence on the voltage, A., 676.
See also Wright, L.
- Hirst, P. See Parker, T. W.
- Hirt, R. See Rapson, W. S., and Reichstein, T.
- Hirvonen, M., occurrence of trypsin in the stomach, A., 1025.
- Hirwe, N. W., Jadhav, G. F., and Chakradeo, Y. M., derivatives of salicylic acid. VI. Reaction of thionyl chloride on esters of hydroxybenzoic acids in presence of finely-divided copper. I. Synthesis and constitution of 4:4'-dihydroxy-3:3'-dicarboxydiphenyl sulphide and related compounds, A., 343.
- Hirzel, A. S., cold-mix paving material, (P.), B., 727. Effect of "condition" on colour of body fat in rabbits, B., 1163.
- Hisaw, F. L. See Fevold, H. L.
- Hiscox, A. E., trial burning of cement raw materials, B., 805.
- Hishiyama, K., and Nakamura, M., mordanting silk with chrome alum. IV. and V., B., 267.
- Hissink, D. J., mechanical analysis of soils, B., 243.
- Hitch, E. F. See Du Pont de Nemours & Co., E. I.
- Hitchcock, A. E., indole-3-*n*-propionic acid as a growth hormone and the quantitative measurement of plant response, A., 795. Tobacco as a test plant for comparing the effectiveness of preparations containing growth-substances, A., 1548.
See also Crocker, W.
- Hitchcock, D. I., and Dougan, R. B., f.p. of anti-coagulant salt solutions, A., 579.
- Hitchcock, F. A. See Matson, J. R.
- Hitchcock, L. B., rate of absorption of carbon dioxide; effect of concentration and viscosity of caustic solutions, A., 41.
- and Cadot, H. M., rate of absorption of carbon dioxide; effect of concentration and viscosity of normal carbonate solutions, A., 938.
- and McIlhenny, J. S., viscosity and density of pure alkaline solutions and their mixtures, A., 694.
- Hitchen, C. S., method for experimental investigation of hydrothermal solutions and its application to solubility of silica, A., 292. Pegmatites of Fitchburg, Massachusetts, A., 323.
- Hitchen, C. S., and Aubel, R. van, composition and age of crystalline uraninite from Katanga, A., 191.
- Hitchens, R. M., assay methods for salts of organic acids, A., 507. Determining acetylsalicylic acid in presence of medicinal products, B., 173.
- Hitchner, E. R., physiological characteristics of propionic acid bacteria, A., 255.
- Hitner, H. F., and Pittsburgh Plate Glass Co., apparatus [electric furnace] for melting vitreous materials, (P.), B., 23.
- Hitzrot, L. H. See Johnson, J.
- Hixon, R. M., McGlumphy, J. H., Eichinger, J. W., jun., Buchanan, J. H., and Iowa State Coll. of Agric. & Mechanic Arts, isolation of levulose as lime [calcium] levulosate, (P.), B., 871.
See also Goodhue, L. D., and Walde, A. W.
- Hixson, A. W., and Scott, C. E., absorption of gases in spray towers, B., 530.
- Hjelmsblad, K. W. J., electric accumulators, (P.), B., 1101.
- Hjort, A. See Winge, O.
- Hjort, A. M., De Beer, E. J., Buck, J. S., and Ide, W. S., asymmetrical aryl-alkylcarbamides; preparation, physical properties, and hypnotic effects, A., 1488.
See also Buck, J. S., and De Beer, E. J.
- Hlasko, M., and Salit, A., direct determination of limiting conductivity of strong electrolytes, and conductivity of very dilute weak electrolytes, A., 304. Electrical conductivity of extremely dilute solutions, A., 936. Conductivity of alkali hydroxides in very dilute aqueous solutions, A., 936. Conductivity of silver, thallium, magnesium, and alkaline-earth metal hydroxides in aqueous solution, A., 1078.
- Hlučka, F., direction of polarisation and selectivity of external photo-electric effect of metals, A., 139. Light distribution and the external photo-effect, A., 1191. Reflexion of metals (Cu, Zn, Ni, Ag, and "Hochheim" alloys) in the spectral region 300 to 186 mμ, A., 1310.
- Hnevkovsky, O. See Meyer, Theodor.
- Ho, K., Wan, C. S., and Wen, S. H., iodine value of tung oil; effect of time, excess of Wijs' reagent, and temperature, B., 508.
- Ho, P. C., condensation phenomena in mercury vapour, A., 275. Investigation of the upper limit of the thorium-C + C'' β-ray spectrum by means of the Wilson cloud chamber, A., 425.
and Halliday, E. C., cloud chamber, A., 275.
- Ho, T. L., and Goetz, A., thermal expansion of bismuth single crystals, A., 21.
See also Goetz, A.
- Ho, T. S. See Tseng, C. L.
- Ho, T. Y. See Chi, Y. F.
- Hoagland, D. R. See Chandler, W. H.
- Hoard, J. L., and Blair, V., crystal structures of rubidium and ammonium fluoborates, A., 1450.
and Goldstein, L., structure of caesium enneachlorodiarsonite, Cs₃As₂Cl₉, A., 433. Crystal structure of caesium enneachlorodithallite, Cs₃Tl₂Cl₉, A., 686. Structure of potassium hexachlorothallate dihydrate, A., 1450.
See also Noyes, A. A.
- Hoare, F. E., diamagnetic susceptibilities of salts forming ions with inert gas configurations. I. Halides of sodium and potassium, A., 149.
See also Brindley, G. W.
- Hoare, W. E., tinplate, B., 458.
- and Chalmers, B., examination of the surface of tinplate by an optical method, B., 954.
- Hoather, R. C., and Goodeve, C. F., oxidation of sulphurous acid. III. Catalysis by manganous sulphate. IV. Catalysis by a glass powder containing manganese and iron, A., 42.
- Hobdell, W. F., apparatus for heating liquors in the textile industry, (P.), B., 1042.
- Hoberman, H. D., preparation of chloroacetylpyrocatechol, A., 1126.
- Hoblyn, T. N., and Bane, W. A., apple fertilisation trials, B., 1011.
- Hobrock, R. H., some fundamentals of spot-welding, especially of the light alloys, B., 460.
- Hobson, G. D., viscosimetric measurements on clay suspensions, B., 630.
- Hobson, R. P., growth of blow-fly larvae on blood and serum. II. Growth in association with bacteria, A., 889. Fat-soluble growth factor required by blow-fly larvae. I. Distribution and properties. II. Identity of growth factor with cholesterol, A., 889, 1287.
- Hocart, R., crystals with optical anomalies, A., 571.
- Hoch, H. See Patat, F.
- Hoch, J., preparation of *N*-substituted imines of aliphatic ketones, A., 336. General method of synthesis of the *N*-disubstituted aminoethylenes, CR:CR'NR''Ar, A., 742. Preparation of *N*-carbethoxyketimines, CRR'N.CO₂Et, A., 1483.
See also Ramart-Lucas, (Mme.) P.
- Hochberg, B. M., effect of free electrons on heat-conductivity of silver sulphide, A., 815.
- Hochberger, E., and Canadian Internat. Paper Co., sulphite pulp, (P.), B., 944.
- Hochhofenwerk Lübeck Akt.-Ges., recovery of gold from roasted pyrites, (P.), B., 772.
- Hochschwender, E. See Standard-I. G. Co.
- Hochstätter, W. See Rabe, P.
- Hochstetter, F. W., translucent material [films], (P.), B., 125. Plied aqueous cellulose film, (P.), B., 721.
- Hochwalt, C. A., and Marling, P. E., effect of dehydration of nitrocellulose on "orange peel" of sprayed lacquer films, B., 598.
- Marling, P. E., and Sharples Solvents Corp., dehydration of nitrocellulose and production of lacquers containing the same, (P.), B., 320.
and Thomas, C. Allen, ageing of whisky, (P.), B., 696.
See also Thomas, C. Allen.
- Hock, A. L., Kirkham, A., Spence, H., and Spence & Sons, Ltd., P., vulcanisation of rubber, etc., (P.), B., 35.
and Spence & Sons, Ltd., P., vulcanisation of rubber, etc., (P.), B., 776.
- Hock, H., and Fischer, H., briquette investigations. II. Physico-chemical nature of lignite in relation to properties of technical briquettes, B., 389.
- Hockenyoys, G. L., monochloronaphthalene as insecticide, B., 1013.

- Hockett, R. C., and Hudson, C. S., Emil Fischer's assignment of configuration to *d*-glucose; penta-acetates of *d*-arabitol and *d*-xylitol, A., 1354.
- Hockey, J. F., effects of sprays on apple quality, B., 74.
See also Kelsall, A.
- Hocking, F. D. M. See De Souza, D.
- Hockley, C. F. See Miller, E. B., and Shoosmith, G. T.
- Hodge, E. B. See Hass, H. B.
- Hodge, H. C. See Crowell, C. D., *jun.*
- Hodge, J. C., arc-welding chromium-steel and -iron, B., 728.
- Hodges, G. C., and Ackerman, J. W., maintaining carrying capacity of cast-iron [water] main by introduction of chloramines, B., 336.
- Hodges, M. See Bradley, H. C.
- Hodgson, C. G., and Millars' Machinery Co., drying plant [for road-making material, etc.], (P.), B., 210. [Plant for manufacture of road-making materials, (P.)], B., 1097.
- Hodgson, H. H., and Dyson, R. J. H., bromination of resorcinol monobenzoate and nitration of 4:6-dibromoresorcinol 3-benzoate; example of group migration, A., 1233.
and Elliott, R. L., 3-halogeno-1-nitro-, -1-amino-, and -1-hydroxy-naphthalenes, A., 76.
and Smith, Ernest W., mononitration of α -naphthol and α -naphthyl methyl ether, and mono-reduction of 2:4-dinitro- α -naphthol, A., 856.
and Walker, John, tetrazotisation of aryl diamines with special reference to *o*-phenylenediamine, A., 742.
- Hodgson, R. A., technical control methods used in [rubber] proofing, B., 685.
- Hodgson, R. E., Knott, J. C., Graves, R. R., and Murer, H. K., effect of temperature of artificial drying on digestibility and availability of nutrients in pasture herbage, B., 653.
- Hodkinson, W., benzol recovery and production of motor benzol, B., 392.
- Hodler, R. See Frankenburger, W.
- Hodson, G. N., ceramics and chemical industry, B., 227.
- Höber, R., urea content of frog's kidney, A., 376. Secretion of dyes by the kidney, A., 1003.
- Hoeck, T. van der. See Nieuwenburg, C. J. van.
- Hoecker, F. E., dielectric behaviour of dilute binary solutions, A., 1318.
- Höfiling, R., sodium nitroprusside as a means of differentiating the paratyphoid group of organisms, A., 536.
- Hoeftake, J. M. A., and Korvezee, A. E., liberation of radon by radioactive cells in drinking-glasses, A., 1440.
- Höffer, W., behaviour of selenium in glass, B., 545.
- Höhne, E., and Chélaré, G., has manuring an influence on scab formation in potatoes? B., 603.
- Hoehne, K., triethylenediaminecobaltio salts with mixed anions, A., 946.
See also Meyer, Julius.
- Höhne, R., application of petrographic and microtectonic study of coal in recognising danger from carbon dioxide-bearing seams, B., 611.
- Hök, W., liquid iodine preparations, B., 828.
- Hoeke, F., *o*-nitro-, *m*-nitro-, and 3:5-dinitro-phenylcarbamides as reagents for alcohols, A., 958.
- Hoekstra, J., plasticity and elasticity, especially of unvulcanised rubber, B., 599.
- Hoekstra, J. W. See Briner, E.
- Höll, K., η_{sp} determination (indicator papers), A., 947. Conditions for precipitation of lead chromate in forensic analysis, A., 1182. Diacoloration. I. Analysis of tinctures prepared by the diacolorator. II. Application of the diacolorator in forensic analysis, B., 1164.
- Höltje, R., and Beckert, J., solubility of copper sulphide in alkali polysulphido solutions, A., 576.
and Kahmen, W., behaviour of copper on fusion with sodium carbonate and sulphur, A., 1088.
- Hoen, R. E. See Glattfeld, J. W. E.
- Hönel, H., and Beck, Koller & Co., Inc., artificial [modified alkyl] resins, (P.), B., 816.
Ehrenfeld, J., and Reichhold, O., preparation of oil-soluble hardening phenol-aldehyde resins, (P.), B., 511.
- Hönigschmid, O., and Baudrexler, H., at. wt. of tellurium. III. Analysis of tellurium tetrachloride, A., 801.
and Sachtleben, R., at. wt. of radium, A., 140.
and Schlee, R., at. wt. of tantalum, A., 140.
See also Baxter, G. P.
- Hoepfner, extent and causes of ageing of road tar, B., 1080.
- Hoepfner, W., colour and chlorogenic acid content of coffee beans during roasting, B., 875.
- Hoerbürger, W., and Fink, H., porphyrins excreted in porphyria, A., 1400.
See also Fink, H., and Waldenström, J.
- Hoermann, F. See Hentrich, W.
- Hoerr, N. L. See Bensley, R. R.
- Hoesch, K. H. See Hiedemann, E.
- Hörschen, W. See Diltthey, W.
- Hoessle, C. H. von, and Chem. Fabr. von Heyden A.-G., production of colloidal solutions of inorganic substances [e.g., silver salts] in polyhydric alcohols, (P.), B., 621.
- Hötzl, K. See Ehrenberg, P.
- Höferstad, T. See Tronstad, L.
- Hofasto Akt.-Ges., cellulose and half-stuff, (P.), B., 799.
- Hofeditz, W. See Paneth, F. A.
- Hofer, E., relation between exposure and photographic blackening on exposure to Röntgen rays, A., 177. Determination of small density differences in water, A., 437.
See also Hevesy, G. von, and Seidl, F.
- Hoff, F., and Jeddloh, B. zu, parathyroid hormone and vitamin-A, A., 1543.
- Hoff, H. E. See Nahum, L. H.
- Hoff, J. van 't. See under Synd. "Jozijdhoff."
- Hoff, R. W., determination of hydrocarbons in alcohol containing acetone, B., 12.
- Hoffacker, J. V. See Babcock, C. L.
- Hoffer, M. See Hausser, K. W.
- Hoffert, W. H., Claxton, G., and Hancock, E. G., removal of carbon disulphide from benzols: "methanol-soda process," B., 791.
See also Nat. Benzole Co., Ltd.
- Hoffman, I. C., mineral-deficiency symptoms in tomato and cucumber plants, B., 245.
- Hoffman, J. L., preparation of pure gallium, A., 180.
and Scribner, B. F., purification of gallium by fractional crystallisation of the metal, A., 1470.
See also Roeser, W. F.
- Hoffman, W. S., and Cardon, R., determination of inorganic sulphate in human blood-serum, A., 881.
- Hoffmann, A. (Berlin). See Baukloh, W.
- Hoffmann, A. (Göttingen), compounds with the perovskite structure, A., 433.
- Hoffmann, F., and Schulze, A., m.p. of calcium, strontium, and barium, A., 925. Determination of the m.p. of calcium, strontium, and barium, A., 1063. Determination of m.p. of some chromium-iron resistance alloys, B., 63.
- Hoffmann, Friedrich. See Anselmino, K. J.
- Hoffmann, F. W. See Bockemüller, W.
- Hoffmann, G. H. See Franck, H. H.
- Hoffmann, H., and Roy, R. K. D., Indian bituminous coals, B., 52.
- Hoffmann, J., origin of varying specific weights and changes of lead oxides by grinding and compression, B., 225.
- Hoffmann, Josef, varying β - and γ -ray coloration of $\text{Na}_2\text{O} \cdot 2\text{SiO}_2$ glass and causes of the pure violet colour of manganese-free glass, A., 282.
- Hoffmann, K. A., comparison of natural and synthetic poisons, A., 657.
- Hoffmann, M. See Burés, E.
- Hoffmann, R., influence of grinding of malt on quality of beer, B., 76.
- Hoffmann, R. (Heidelberg), and Schwarzscher, W., absorption spectrum of the carbon monoxide-hæmochromogen, A., 770.
- Hoffmann, W., growth of cereals, especially barley, B., 326.
- Hoffmann, Walther, diagnosis of pregnancy from urine, A., 237.
- Hoffmann-La Roche & Co. Akt.-Ges., F., female sexual hormone, (P.), B., 206. Manufacture of compounds of 1-phenyl-2:3-dimethyl-4-isopropyl-5-pyrazolone [with barbituric acids; pharmaceuticals], (P.), B., 606. 4-Alkyl-, 4-cycloalkyl-, and 4-aralkyl-dihydroresorcinols, (P.), B., 606. Concentrated aqueous solutions of the follicular hormone, (P.), B., 1068. *l*-2-Ketogulonic acid [and its esters], (P.), B., 1165.
- Hofius, T., keeping liquid dairy products fresh, (P.), B., 204.
- Hoflund, S., effect of diet on volatile reducing substances in urine, A., 1268.
- Hofman, J. See Fischer, H.
- Hofman, J. J. See Ensink, A.
- Hofman, P. S. See Pavlova, S. N., and Velikovski, A. S.
- Hofmann, A. See Stoll, A.
- Hofmann, E., relationship between η_{sp} and source of different carbohydrases, A., 402.
See also Neuberg, C.
- Hofmann, H., and Amer. Bemberg Corp., artificial filaments, (P.), B., 720.
- Hofmann, L. See Pauli, W.
- Hofmann, P. O., photographic development effect, A., 1331.
- Hofmann, R. (Rostock). See Straube, G.
- Hofmann, Rudolf (Bukarest), determination of small amounts of nicotine, nephelometrically, B., 782.
and Popovici, N., colorimetric determination of small quantities of morphine, A., 877.

- Hofmann, Rudolf (München), observation of motions due to electric fields acting on dielectric liquids, A., 283.
- Hofmann, U., X-ray analysis of lamellar disperse systems, A., 163.
- and Endell, K., activation of crude fuller's earth, B., 451.
- Endell, K., and Bilke, W., swelling of bentonite and its technical application, B., 947.
- See also Endell, K., Jacob, A., Rüdorff, W., and Wilm, D.
- Hofmann, W. T. See Backman, B. C.
- Hoffman, M. V., and Kornevic, K. F., concentrating anthracene with furfuraldehyde, B., 12.
- Hogan, A. G., and Richardson, L. R., plural nature of vitamin-B, A., 1174.
- Hogan, M. E., jun. See Frederickson, W. R.
- Hoge, H. J., magnetic anisotropy of crystals of Sn, and of Sn with added Sb, Cd, or Ga, A., 1453.
- Hogg, G. F., properties of pale wood- and gum-rosins, B., 465.
- Hogg, S. J. See Wagner, W. G.
- Hogg, W. H., chocolate spot of beans, B., 74. [Control of] finger and toe [disease], B., 74.
- Hoggatt, G. A., and Certain-Teed Products Corp., cementitious material, (P.), B., 357.
- Hogue, M. J., effect of amebicidal drugs on tissue culture cells (arsenious trithio-salicylic acid, carbarsone, kurechi bismuth iodide, proparsamide, vioform), A., 1161.
- Hogwood, H. E. See Bates, L. F.
- Hohenberg, E. See Silberstein, F.
- Hohenemser, W. See Meyer, K. H.
- Hohl, C. D. See Broderick, T. M.
- Hohlfelder, L. P. See Hood, G. R.
- Hohn, H., alternating-current corrosion. II., B., 855.
- and Lange, E., inter-phase energies in systems of pure electro-neutral phases, A., 1458.
- Hoja, E. See Galecki, A.
- Holbeck, H. F., grinding apparatus, (P.), B., 1121.
- Holck, H. G. O., effect of calcium, strontium, and barium chloride on tissue oxidation, A., 896.
- Holcomb, H. E., and Johns-Manville Corp., porous [acoustic-insulating] material, (P.), B., 1045.
- Holcomb, R., analysis and composition of meat of domestic fowl, B., 331.
- and Maw, W. A., composition of flesh of domestic fowl, A., 377.
- Holden, H. F., hemolysis by Australian snake venoms. IV. Copperhead hemolysin, A., 1143.
- See also Hicks, C. S.
- Holden, H. S., culture vessel, A., 798.
- Holden, J. See Halden & Co., Ltd., J.
- Holder, G. C. See Dean, D. K.
- Holderby, J. M., and Zea, W. L., biochemical oxygen-demand test, as influenced by the ratio of organic carbon to total nitrogen [in sewage], B., 431.
- Holderer, G. B., and Chili Exploration Co., explosive, (P.), B., 926.
- Holderer, M., why does water wet glass? A., 29.
- Holdridge, C. E., and Cavett, J. W., determination of urinary chlorides with mercuric nitrate, A., 1399.
- See also McClendon, J. F.
- Holdsworth-Haines, W., patchouli oil of the Seychelles, B., 654.
- Holford, H. J., distillation of carbonaceous material, (P.), B., 935.
- Holgate, J. B. See Greenwood, John.
- Holiday, E. R., ultra-violet absorption of crystalline vitamin-B, A., 544.
- Screens for varying the colour and intensity of a beam of light, (P.), B., 526.
- Kerridge, P. M. T., and Smith, Frank C., amount of hæmoglobin in the blood, A., 1391.
- Holladay, J. A., and Kemet Labs. Co., Inc., thermionic device, (P.), B., 415.
- Holland, A. J., and Turner, W. E. S., breaking strength of glass, B., 100.
- See also Preston, E.
- Holland, F. L., citrus fertilisers and lime, B., 1158.
- Holland, W. E. See Wooster, C. B.
- Holland, W. W., Jones, G. D. O., and Johnston, H. W., groundwood studies. II. Effect of process variables in grinding mechanical pulp, B., 1088.
- Hollander, F., composition of pure gastric juice, A., 884.
- Holleben, von, problems of colour photography, B., 287.
- Holleck, L., dolomite lime as a constituent of mortar, B., 675.
- Holleman, L. W. J., De Jong, H. G. B., and Modderman, R. S. T., lyophilic colloids. XXIII. Heats of wetting and gelation of gelatin, A., 32.
- Hollens, W. R. A., and Spencer, J. F., magnetic susceptibility of cadmium compounds, A., 689. Electrometric determination of thallium, A., 1338.
- Hollenweger, M., and Rumpelt, H., felspar system and weathering of felspar to kaolin, A., 935.
- Holley, C. D., paint testing, B., 860.
- Holley, C. E., treatment of copper and other metals, (P.), B., 680.
- Hollings, H., Bruce, R. N. B. D., and Griffith, R. H., catalysis in hydrocarbon chemistry. I. High-pressure hydrogenation of coal tar, B., 292.
- and Hutchison, W. K., gas purification, B., 932.
- See also Gas Light & Coke Co.
- Hollingworth, J., structure of the ionosphere, A., 1298.
- Hollmann, H. E., and Bauch, W., magnetic Barkhausen effect by irradiation with ultrasonic waves, A., 287.
- Holloway, H. H., and Apollo Steel Co., surface treatment of metal [steel], (P.), B., 193.
- Holm, E. R., protection of surfaces [with flakey substances], (P.), B., 34.
- Holm, K., relation of lipolysis in blood to the defence reaction of the animal organism under administration of different vitamins, A., 792.
- Holm, M. M. See Standard Oil Co. of California.
- Holm, R., Gildenpfennig, F., and Störmer, R., transference of matter in electrical switch contacts, B., 461.
- Holm, V. See Davidson, A. W.
- Holman, D. V., and Ellsworth, H. C., hyperglycæmic constituent of posterior lobe pituitary extract, A., 667.
- Holman, M. See Pittman, M. S.
- Holmberg, B. See Berg, G. A., and Hähnel, S.
- Holmberg, C. G., influence of adenylic acid on certain enzymic, especially oxidative, processes in muscle extract, A., 532.
- Mechanism of the activation of intestinal phosphatase by magnesium, A., 1280.
- Holmbergh, O., adsorption of malt α -amylase on calcium phosphate, A., 1162.
- Holmboe, C. F. See Nordiske Fabriker De-No-Fa A./S.
- Holmes, A., measurement of geological time, A., 843.
- Holmes, A. D., Pigott, M. G., and Packard, W. H., effect of supplementary iodine on nutritive value of chick rations, A., 654.
- and Remington, R. E., iodine content of American cod-liver oil, B., 859.
- Holmes, B. E., metabolism of tissues growing in culture. VI. Effect of radium on lactic dehydrogenase and arginase systems of embryonic tissue, A., 1414.
- Holmes, C. W. H., and Birtley Co., Ltd., separation of dry materials, (P.), B., 210.
- Holmes, E. See Dixon, K. C.
- Holmes, E. G. See Gemmill, C. L.
- Holmes, E. L., derivatives of glycerol; [acetol], (P.), B., 664.
- See also Adams, B. A.
- Holmes, F. B. See Du Pont de Nemours & Co., E. I.
- Holmes, F. E., apparatus for extraction of solids by upward flow of solvent, A., 321.
- See also Guest, G. M.
- Holmes, G. M. See Patterson, T. S.
- Holmes, G. W., determination of suspended solids in sewage by light absorption, B., 1071.
- Holmes, H. N., and Bromund, W. H., preparation of bixin, A., 1244.
- Cassidy, H., Manly, R. S., and Hartzler, E. R., preparation of a potent vitamin-A concentrate, A., 1546.
- Leicester, H. M., and S. M. A. Corp., recovery of carotene from green leafy plant materials, (P.), B., 174. Recovery [isolation] of carotene [from plants], (P.), B., 478.
- Holmes, L. See Accles & Pollock.
- Holmes, M. C., sampling analyses and sample size, B., 609.
- Holmes, M. E. See Dickens, D. A.
- Holmes, S. J. See under Brit. Unit Heater Co.
- Holmes, T. See Clemo, G. R.
- Holmes, W. F., jun., Keefer, C. S., and Myers, W. K., antitryptic activity of synovial fluid in patients with various types of arthritis, A., 885.
- See also Keefer, C. S., and Myers, W. K.
- Holmes, W. K. See Texas Co.
- Holmes & Co., Ltd., W. C., Cooper, C., and Henshaw, D. M., treatment of ammoniacal liquor containing phenolic bodies, (P.), B., 440. Purification of combustible gases, (P.), B., 891.
- Holmquist, C. A., o-tolidine test [for free chlorine], B., 128.
- Holmqvist, A., antimony electrode. II., A., 826. Antimony electrode for pH measurement, A., 1476.
- Holmsen, P., flotation reagents and flotation chemistry, B., 595.
- Holness, R. P. G. See Fleck, H. R.
- Holroyd, R. See Imperial Chem. Industries.
- Holscher, H. H. See Porter, F. R.
- Holschneider, F. W. See Winterfeld, K.
- Holst, W., rotation structure of AlCl bands, A., 280.
- Holst, W. A., jun. See Nat. Aniline & Chem. Co.
- Holste, A., and Miholić, S. S., pharmacology and chemistry of coffee, A., 673.
- Holstein, L. S. See New Jersey Zinc Co.

- Holt, D. A. See Du Pont de Nemours & Co., E. I.
- Holt, E. von. See Fischer, Hans.
- Holt, H., jun. See Oldham & Son, Ltd.
- Holt, H. von. See Hertel, E.
- Holt, H. S. See Du Pont de Nemours & Co., E. I.
- Holt, L. C., Mattison, E. L., and Kinetic Chemicals, Inc., organic fluoro-compounds, (P.), B., 618.
See also Du Pont de Nemours & Co., E. I.
- Holt, L. E., jun., Tidwell, H. C., and Kirk, C. M., fat metabolism in infants, A., 891.
- Holt, M. L., volumetric determination of tungsten; Dotreppe's method, A., 56. Electrolytic separation of tantalum, A., 831.
- Holt, S. See Burawoy, A.
- Holt, T. W., Kilpatrick, A. S., and Stuart, J. F. W., apparatus for fluid treatment of textile fibres, threads, and fabrics, (P.), B., 626. Lustreing of textile fibres in a condition preparatory to spinning, (P.), B., 946.
- Holt, W. L. See Smith, W. H., and Tener, R. F.
- Holter, H., Kunitz, M., and Northrop, J. H., fission of cleavage by various trypsin preparations, A., 1279.
See also Linderstrom-Lang, K.
- Holter, W. L., and Van Schaack Bros. Chem. Works, Inc., waterproofing composition [containing rubber], (P.), B., 322.
- Holthaus, C., determination of sulphur in ferro-alloys, B., 311. Corrosion of iron dykes in river- and sea-water, B., 498.
- Holtkamp, R. F., processing [dyeing with] catech, B., 989.
- Holven, A. L., and Gillett, T. R., compensating photo-electric colorimeter, B., 1001.
- Holwerda, K., colloid chemistry of edestin. I., A., 1203.
See also Verkade, P. E.
- Holz, A., simultaneous production of potassium nitrate and ammonium sulphate, (P.), B., 899.
- Holzappel, A. C., anti-fouling paints and compositions, (P.), B., 33.
- Holzappel, K. E. E., and Krupp Grusonwerk A.-G., F., apparatus for producing cement and similar substances, (P.), B., 24.
- Holzen, H. See Späth, E.
- Holzhydrolyse Akt.-Ges., crystalline sugar from wood-sugar solutions, (P.), B., 119. Polymerisation of monomeric aldehyde sugars (aldoses), (P.), B., 120, 970.
See also Specht, H.
- Holzner, J., stilpnochlorane from Gobitschau, Moravia, A., 469. Constitution of stilpnomelane and stilpnochlorane, A., 725. Chemical structure of clay minerals and of corresponding silicates of trivalent and bivalent metals, A., 1220.
- Holzwarth, C. See Scanlan, G. A.
- Holzwarth, H., and Holzwarth Gas Turbine Co., apparatus for heat interchange, (P.), B., 210.
- Holzwarth Gas Turbine Co. See Holzwarth, H.
- Homer, C. E. See Hedges, E. S.
- Homès, M. V., balance of ionic sodium and calcium and cell-permeability, A., 265.
- Hommerberg, C., yeast-phosphatase, A., 661.
- Honcamp, F., Meier, O., Neumann, K., Schramm, W., and Wöhlbier, W., losses of crude and digestible nutrients in sugar-beet leaf silage made in the usual way and with addition of different preservatives, Alfasil, Defu solution, and Penthesta, B., 923.
- Honda, K., nature of a solid solution, A., 1455.
- Masumoto, H., and Shirakawa, Y., new K.S. permanent magnet, B., 29.
- and Shimizu, Y., magnetism of tin, A., 287. Change of magnetic susceptibility of metals during melting and allotropic transformation, A., 1453.
- and Tokunaga, M., true specific heat of some metals and alloys, A., 690.
- Honert, P. H. van der, nutritional physiology of sugar-cane, A., 131.
- Honess, A. P., and Williams, F. J., dickite from Pennsylvania, A., 954.
- Hong, W. L. See Yun, I. S.
- Hongo, S., relation of sex to susceptibility to toxicity of bile salts, A., 526.
- Hongo, Y., perfusion of the stomach. IX.—XI. Creatine, A., 1152.
- Honig, P., removal of non-sugars in raw cane juice clarification, B., 328.
- and Alewijn, W. F., boiling [of after-product sugar] during the 1933 campaign, B., 692.
- Nicola, P. C., and Corver, J. T., viscosity and conductivity of supersaturated sugar solutions, B., 693.
- Honigmann, E. J. M., graphical thermodynamics of real gases, A., 815.
- Honigmann, H. See Dalmer, O.
- Honigmann, L., strain in glass at glass-metal seals, B., 1142.
- Honnelaire, A. See Clément, L.
- Honus, O. F., heat effect in monocalcium silicate formation from gypsum and silicic acid, A., 584.
- Hood, A. M., centrifugal separators, (P.), B., 50.
- Hood, G. R., and Hohlfelder, L. P., viscosity and fluidity of lithium chloride in acetone solution, A., 31.
- Hood, H. P., and Corning Glass Works, [glass for] metal-vapour lamp, (P.), B., 902.
- Hooley, W. C., Flynn, E. J., and New Jersey Zinc Co., pigments [lithopone] by wet precipitation, (P.), B., 239.
- Hooff, F. V., and De Leeuw, F. J. G., occurrence of acetylmethylcarbinol in bread and its relation to bread flavour, B., 652.
- Hooghoudt, S. B., physical measurements in soils, B., 243.
- Hook, A. van. See Taylor, H. A.
- Hooker, M. O. See Fischer, M. H.
- Hooker, S. B., and Boyd, W. C., equivalence-point ratio of antibody to antigen in ovalbumin precipitates, A., 1395.
- and Follensby, E. M., scarlet fever. II. Toxins produced by hæmolytic streptococci of scarlatinal origin, A., 1168.
- Hooker Electrochemical Co. See Stuart, K. E.
- Hooper, C. W. See Winthrop Chem. Co.
- Hooper, G. S., and Kraus, C. A., electrolytic solutions. XIV. Dielectric constant of solutions of electrolytes in benzene, A., 13.
See also Foster, L. S.
- Hooper, P. D. See Marshall, T. J.
- Hoopes, E. C., and King, J. L., prolongation of pregnancy in the rat by injection of human pregnancy urine extract, A., 1425.
- Hoos, B. G. See Schur, M. O.
- Hooton, A. J. S., Davis, H. H., and Johnson & Co., Ltd., S. H., dialysing apparatus of filter-press type, (P.), B., 51.
- Hoover, G. I., use of white-water in the fine paper industry, B., 399.
- Hoover, K. H., and Assoc. of Amer. Soap & Glycerine Products, Inc., compounding non-corrosive [anti-freeze] fluid, (P.), B., 706.
- Hoover, S. R. See Allison, F. E.
- Hope, C. See King, C. J.
- Hope, H. B. See Coull, J.
- Hopkins, B. S. See Meyers, E. L., Pearce, D. W., and Reed, J. B.
- Hopkins, C. Y., polarimetric determination of starch [in wheat products], B., 250.
- and Graham, R. P., starch content of Canadian wheats, B., 823.
See also Bayley, C. H.
- Hopkins, E. S., coagulation control [of water] with a recording potentiometer, B., 336.
- Hopkins, E. W., effect of long and short day and shading on nodule development and on composition of the soya bean, A., 796.
- Hopkins, F. G., discovery and significance of vitamins, A., 792.
- Hopkins, H. G., thickness of the amorphous layer on polished metals, A., 1308. Electron-diffraction examination of protective films deposited on magnesium and magnesium alloys by the R.A.E. [Royal Aircraft Establishment] dichromate process, B., 955.
- Hopkins, H. H. See Du Pont de Nemours & Co., E. I.
- Hopkins, H. S., catalase and oxidative processes in animal tissues as possible factors in adaptation, A., 400.
- Hopkins, J. W., influence of weather conditions on nitrogen content of wheat. I. and II., B., 474, 1160.
See also Cook, W. H., Crampton, E. W., and Malloch, J. G.
- Hopkins, M. B. See Standard Oil Development Co.
- Hopkins, P., assay of black sands [for gold, etc.], B., 412.
- Hopkins, R. H., assimilation of nitrogen by brewers' yeast, A., 253.
- Hind, H. L., and Day, F. E., malt analysis; British and Continental methods, and interrelationship of results, B., 169.
- and Roberts, R. H., kinetics of alcoholic fermentation of sugars by brewers' yeast. I. Effect of concentrations of yeast and sugar. II. Relative rates of fermentation of glucose and fructose. III. Temperature coefficients of the rates of fermentation of glucose and fructose, A., 661, 1538.
- Hopkins, S. J., and Wormald, A., action of phenylthiocarbimide on insulin, A., 411.
- Hopkinson, L. T., canned salmon, (P.), B., 923.
- Hopkirk, C. S. M. See Cunningham, I. J.
- Hopper, I. V., Hendry, J. T., and Dawson, R. T., aldehyde-phenylhydrazonesulphonic acids, A., 620.
- Hopwood, F. L., and Chalmers, T. A., directed diffusion or canalisation of slow neutrons, A., 426.

- Hopwood, F. L. See also Banks, T. E., and Brash, A.
- Hopwood, J., and Adams-Hydraulics, Ltd., treatment of sewage and similar liquids, (P.), B., 1072.
- Hora, S. L., biology of precipitating action of mucus of boro fish, *Pisodonophis boro* (Ham. Buch.), A., 896.
- Horak, O. See Sekla, B.
- Horak, W., effect of alumina on mechanical properties of glass, B., 453.
- and Sharp, D. E., effect of zirconia on chemical durability of borosilicate glasses, B., 992. Influence of zirconia on elasticity of soda-lime glasses, B., 992.
- Horat, L. E., and Ford, O. W., gas-burner top for ignition in determination of potash in fertilisers, B., 515.
- Horeau, A. See Vavon, G.
- Horel, J., chemistry of tobacco with reference to tobacco raised in Czechoslovakia, B., 1164.
- Horgan, T. J., modern drying machinery, B., 1073.
- Hori, Y., electrolytic production of heavy water, A., 831.
- Horiba, S., and Kosaki, T., study of enzyme action by thermal analysis of reaction velocity. I. Action of invertase, A., 1278.
- Horie, F., composition of Fushun shale oil. I. Fractional distillation up to 150°. II. Saturated hydrocarbons boiling below 40°. III. Unsaturated hydrocarbons boiling below 40°. IV. Properties of fractions 85–115°. V. Hydrocarbons not attacked by bromine at 0°. VI. Olefine hydrocarbons. VII. and VIII., B., 391, 613, 885.
- Horie, S., glycogen. I. Nasal polypus. II. Occurrence of glycogen in the neoplasma and allied changes in epithelial covering, A., 237, 1397.
- Horie, T. See Takamatsu, Y.
- Hori, Z., synthesis of thiocyno-carbamide derivatives, A., 1488. Thiazole derivatives from ω -chloroacetylpyrocatechol, A., 1511.
- Horiokoshi, S., action of opium alkaloids on the rabbit uterus *in situ*, A., 1156.
- Horimi, J., influence of dihydroxyphenylalanine on adrenaline glycogenolysis, A., 1172.
- Horio, M., and Yamashita, S., internal light filters; effect of azo-dyes on the photolysis of diazo-compounds, A., 713.
- See also Lauer, K.
- Horiuchi, R., induced reaction, A., 1328.
- Horiuti, J., and Polanyi, M., exchange reactions of hydrogen on metallic catalysts, A., 44. Direct introduction of deuterium into benzene, A., 74. Mechanism of ionisation of hydrogen at a platinum electrode, A., 829.
- Horkheimer, P., m.p. of sulphosalicylic acid, A., 974. Determination of essential oils in drugs, B., 286. Stability of hydrogen peroxide solution, B., 628.
- Horn, D. W., rational lactometer, B., 426. Lactometer, reading total solids, B., 746.
- Horn, F. (Bonn). See Bürger, M.
- Horn, Freeman, aluminium die castings, B., 361.
- Horn, K. See Micheel, F.
- Horn, O. See Meyer, Karl.
- Horn, R. W. P., and Ashton, E., [shaft] furnace and kiln and their operation, (P.), B., 337.
- Horn, V., bone tests in pigs, A., 393. Pig-fattening trials with vitamin-A and -D supplements. I. and II., B., 285. Supplementary feeding of vitamin-D preparations to milch cows. I. and II. Action of vigantol and vithal on yield and constituents of milk and on the chemical and morphological composition of the blood, B., 522.
- Horn, W. R., and Mennie, J. H., heat capacity measurements on gelatin gels. III., A., 1202.
- See also Munro, L. A.
- Hornberger, W. F., raw [cane] sugar, (P.), B., 694.
- Horne, A. S., numerical distribution of micro-organisms in the atmosphere, A., 535.
- Horne, G. H., Lissman, M. A., and Internat. Precipitation Co., apparatus for electrical precipitation of suspended particles from gases, (P.), B., 67. Apparatus for separating suspended material from gases, (P.), B., 611. Means for treating gases, (P.), B., 1077.
- Horne, H. F. See Westinghouse Electric & Manufg. Co.
- Hornel, J. C., catalysis of ester hydrolysis by D_3O^+ ions, A., 829.
- Horner, C. K. See Burk, D.
- Horner, H. R. See Derby, I. H.
- Horner, R. G. See Woodward, L. A.
- Hornberg, V. O., and Nitromal Corp., ferrous alloys [malleable cast iron], (P.), B., 192, 413.
- Horning, E. S. See Schmelkes, F. C.
- Hornus, G., and Haber, P., action of anti-septics on poliomyelitic virus *in vivo* and *in vitro*, A., 257.
- Horovitz-Vlassova, L. M., Katschanova, E. E., and Tkatshev, A. D., behaviour of fats and oils towards air, light, and plant enzymes, B., 859.
- and Novotelov, N. V., decomposition of pentosans and pentoses by micro-organisms, A., 898. Production of vegetable oils by biochemical methods (the Beckmann process), B., 1003.
- Horrabin, H. W. See Cornog, J.
- Hormann, P. [with Thilo, K.], picrotoxin. XII. Degradation of picrotic acid, $C_{15}H_{18}O_8$, to the dibasic acids, $C_7H_{14}O_6$ and $C_{12}H_{16}O_6$, A., 1496.
- Horning, C. T., dyeing of sponges and loofahs, B., 847.
- Horsburgh, G. D. L. See Swift Levick & Sons.
- Horsfall, F. L., formaldehyde and serum-proteins; immunological characteristics, A., 1143. Formaldehyde hypersensitivity, A., 1143.
- Horsfall, J. G., pasteurising soil electrically to control damping-off, B., 567.
- and Hamilton, J. M., fungicidal possibilities of red copper oxide, B., 567.
- See also Isenhour, L. L., and Kertesz, Z. I.
- Horsfall, J. J. See Migrdichian, V.
- Horsley, G. F. See Imperial Chem. Industries.
- Horsley, L. H., anomalous scattering by suitable nuclear fields, A., 1048.
- See also Beck, G.
- Horst, D. T. J. ter, Brinkman, H., and Ornstein, L. S., change of temperature with time in the alternating-current arc discharge, A., 1046.
- See also Ornstein, L. S.
- Horst, I. ter. See Diltthey, W., and Schmitz-Dumont, O.
- Horst, (Mlle.) M. G. ter, tetrammine complexes of tervalent cobalt, A., 594.
- Horstkotte, E. H. See Gen. Electric Co.
- Horter, C. W., and Lebus, W. E. O., preparation for rendering substances containing albumin or cellulose capable of swelling, (P.), B., 332.
- Horton, J. W., use of vacuum tubes in measurements, A., 723.
- Horton, P. M., and McCormick, W. F., oxidised turpentine; preparation and use in lacquer formulation, B., 31.
- Horváth, G. See Mansfield, G.
- Horvitz, D. See Morton, A. A.
- Horwood, J. F. See Steacie, E. W. R.
- Hosaka, N., influence of lipin on the carbohydrate metabolism. I. Changes in the content of glucose and lactic acid in blood and of the latter in urine of rabbits caused by the injection of cholesterol and lecithin, A., 1015.
- Hosemann, R. See Pahl, M.
- Hoshino, H. M. See Godfrey, G. H.
- Hoshino, T., constitution of abrin, A., 1131, 1375.
- and Kobayashi, Teinosuki, eserine. III. Synthesis of *d*- and *l*-eserethole methiodide, A., 227. Syntheses in the indole group. XII. III. Synthesis of *d*- and *l*-eserethole methiodide. XIII. Synthetical experiments with eserine. IV. Synthesis of *dl*-eserethole, A., 499, 1378.
- Kobayashi, Teinosuki, and Shimodaira, K., synthesis of *dl*-eserethole and bufotenine; synthetical experiments on eserine. IV., A., 1256.
- and Kotake, Y., syntheses in the indole group. XI. Synthetical experiments with eserine. II., A., 499.
- and Shimodaira, K., syntheses in the indole group. XIV. Synthesis of bufotenin; 3- β -hydroxyethylindolenine, A., 1378.
- Hosking, J. R., purification and standardisation of kauri gum, B., 1055.
- and Brandt, C. W., diterpene oxides of the resin of *Dacrydium Colensoi*. II. Manoyl oxide. III. Ketomanoyl oxide, A., 351, 496. Diterpene alcohol from the wood of *Dacrydium biforme*. I., A., 1127.
- Hosking, J. S., carbon: nitrogen ratios of Australian soils, B., 1059.
- See also Marshall, T. J.
- Hoskins, J. K., and Butterfield, C. T., determining bacteriological quality of drinking water, B., 1072.
- Hoskins, R. G. See Freeman, Harry.
- Hoskins, W. M., and Harrison, A. S., buffering power of contents of ventriculus of the honey bee and its effect on toxicity of arsenic, B., 375.
- Hosoi, T. See Ogata, A.
- Hospes, B., yield and yield tables [in potato-starch manufacture], B., 870. Progress of purity quotient during the manufacture of potato starch, B., 1159.
- Hoss, W., wet electro-filtration in sulphite pulp industry, B., 845.
- Hossack, J., determination of esters in alcoholic liquids, B., 474.
- Hossenlopp, A. M., and Russell, R., jun., effect of furnace atmosphere and partial vacuum on vitrification of a high-mullite porcelain, B., 804.

- Holchkiss, M., specificity of hexosidases; comparison of activity of *E. coli* and *E. communior*, A., 1169.
See also Waksman, S. A.
- Hoth, W. See Grossfeld, J.
- Hothersall, A. W., influence of the basis metal on structure of electrodeposits, B., 997.
and Bradshaw, W. N., improvement in quality of tinplate by superimposed electrodeposition of tin, B., 1050.
and Hammond, R. A. F., effect of oxidising agents on nickel solutions. I. Hydrogen peroxide and nickel nitrate. II. Chromic acid, A., 45, 1467.
See also Macnaughtan, D. J.
- Hotis, R. P., and Woodward, T. E., heavy cottonseed-meal feeding in relation to dairy cows, B., 827.
- Hotta, R., specificity of phosphatase, A., 122.
- Hotte, G. H., preparation of fibre candles [in textile microscopy], B., 666.
See also Schwarz, E. R.
- Hou, H. C., modification of Sherman and Smith's vitamin-A-deficient ration for rats, A., 1035. Inter-relationship of vitamins and other dietary constituents. I. Their relation to production of urinary calculi, A., 1427. Differences in values of vitamin-C by chemical and biological methods, A., 1430. Vitamin-C of Chinese oranges, A., 1430. Vitamin-C content of Chinese amaranth (*Hsien ts'ai*), A., 1430.
- Houben, L., some applications of formaldehyde pretannage to chamoising, B., 280. Adhesion of curried [belting] leather [to pulleys], B., 864.
- Houck, C. A., and Moore, F. J., moulding preparation [from Congo copal resin], (P.), B., 320.
- Houdremont, E., Bennek, H., and Schrader, H., hardening and tempering of steels containing carbides of low solubility, especially vanadium steels, B., 905.
- Kallen, H., and Gebhard, K., comparison of high-speed steels made in a coreless induction furnace and an arc furnace, B., 499.
- and Korschman, H., origin of flakes in steel, B., 457.
- and Schrader, H., influence of alloy elements on behaviour of steels in case-hardening, B., 677.
- Schrader, H., and Clasen, A., testing properties of plain steels, B., 1145.
- Houdry, E., and Houdry Process Corp., treatment of heavy oils, etc., for conversion thereof into lighter products, (P.), B., 214. Treatment of soda-treated tars and other residues of the petroleum industry, for conversion thereof into lighter products, (P.), B., 214. Apparatus for effecting chemical reactions by the use of contact masses, (P.), B., 1073. Use of contact masses, (P.), B., 1073.
See also Houdry Process Corp.
- Houdry Process Corporation, catalytic purification or polymerisation of cracked hydrocarbon vapours, (P.), B., 215. Reaction chamber for contact masses, (P.), B., 753.
- Harrison, J. W., and Lassiat, R. C., apparatus for distribution of reactant, regenerating, and similar fluids to catalytic and similar contact materials, (P.), B., 385.
- Houdry Process Corporation, and Houdry, E., heat treatment and vaporisation of hydrocarbon distillates and residues, (P.), B., 616.
- Houdry, E., Lassiat, R. C., and Hammell, R. H., reaction chambers containing contact masses and their assembly, (P.), B., 530.
- Prickett, T. B., and Houdry, E., control of temperature and fluid distribution in contact masses, (P.), B., 754.
See also Houdry, E., Joseph, A., and Lassiat, R. C.
- Hougen, O. A. See Colburn, A. P., Walters, R. A., and Wolf, H. W.
- Hougen, V. H. See Spengler, J. E.
- Houget, J. See Cahn, T.
- Hough, A., and Leonhard Wax Co., T., bleaching of waxes, (P.), B., 912. Purification and bleaching of waxes, (P.), B., 912.
- Hough, S. O. See Herty, C. H., jun.
- Hough, W. A., and Ficklen, J. B., volatilisation of iodine from dilute iodine-potassium iodide solutions, A., 52.
- Hough, W. S., nicotine kills codling moths, B., 326.
- Houghten, F. C., and Thiessen, L., carbon monoxide alarm and ventilation control, B., 1070.
- Houghton & Co., E. F. See Dambacher, F.
- Houlder, C. B. See Cone, F. H.
- Houong, L. See Cheng Da-Chang.
- Houpt, A. G., Sherk, K. W., and Browne, A. W., oxidation of hydrazine. IX. Mono- and di-electronation of hydrazine by permanganate in hydrochloric acid solution, A., 313.
- Householder, H. See Morgan, A. F.
- Houseman, C. R. See Brit. Oxygen Co., Ltd.
- Houseman, P. A., and MacAndrews & Forbes Co., pharmaceutical preparation; [laxative], (P.), B., 924.
- Housley, W. L., and King, R. M., mechanics of enamel adherence. XI. Application of theory of dendritic adherence to development of white ground-coats for sheet steel, B., 1093.
- Houssa, G. See La Barre, J.
- Houssa, P., effect of adrenaline on blood-sugar of phloridzinised animals, A., 665.
See also La Barre, J.
- Houssay, B. A., Biasotti, A., Mazzocco, P., and Sammartino, R., action of anterior pituitary on the adrenals, A., 667.
- Deulofeu, V., and Mazzocco, P., indoxylgenic substances in the organism, A., 1015. Organs which regulate indolemia and indoxylemia after injection of indole, A., 1015.
- Mazzocco, P., and Potick, D., origin of blood-indoxyl, A., 373. Role of organs in the elimination of blood-indoxyl, A., 374.
- Houston, B. See Bjerregaard, M. E.
- Houston, D. F., effect of protective coatings on absorption of moisture by gelatin-latex gas-cell fabrics, B., 1038.
- Houston, J., Canning, G., and Graham, H., relation between general absorption and residual affinity: heterocyclic compounds, A., 1052.
- Houston, W. V., nuclear model, A., 1051.
See also Kinsler, L. E.
- Houstoun, R. A., and Younger, A. J., personal error in colorimetry, A., 947.
- Houwink, R., influence of uni- and tri-dimensional micelle growth on some properties of certain colloids, A., 580. Resins as colloids, B., 417. Determination of the particle size of fillers, B., 497.
and Klaassens, K. H., molecular form and reaction mechanism in the formation of glyptal resin, B., 465.
- Hove, H. von, action of halogens on wool, B., 95.
- Hoveman, F. C. See Hoveman, W. A.
- Hoveman, W. A., and Hoveman, F. C., filters, (P.), B., 834.
- Hovey, A. G. See Gen. Electric Co.
- Hovey, B. H. See Ferguson, T. G.
- Hovorka, F., and Dearing, W. C., salt error and normal electrode potential of the quinhydrone electrode at 25°, A., 584.
- Hovorka, V., application of acetone solutions of sulphur dioxide to the gravimetric determination of selenium, A., 718. Separation of selenium from cadmium, lead, bismuth, antimony, molybdenum, tungsten, and vanadium, A., 948. Loss of selenium in reduction of selenites by hydrazine, A., 1090.
- How, H. W., high pressure, high-temperature heat exchanger, (P.), B., 2.
- Howard, A. See Eisler, M.
- Howard, D. H., jun., and Browne, A. W., behaviour of the hydronitrogens, and their derivatives in liquid ammonia. X. Equilibria in the system hydrazine trinitride-ammonia, A., 35.
- Friedrichs, F., and Browne, A. W., behaviour of the hydronitrogens and their derivatives in liquid ammonia. IX. Equilibria in the system ammonium trinitride-ammonia, A., 35.
- Howard, E. See Grollman, A.
- Howard, F. A. See Standard Oil Development Co.
- Howard, G. C., lignin derivatives, (P.), B., 17, 987.
and Harmon, C., lignin dispersion, (P.), B., 266.
- Howard, H. C. See Juettner, B., and Smith, R. C.
- Howard, J., and Taylor, H. S., adsorption of gases by chromium oxide gel, A., 28.
- Howard, J. A., cellular rubber and similar material, (P.), B., 113.
- Howard, J. B., normal vibration frequencies of NH₃, PH₃, and AsH₃, A., 685.
- Howard, J. E. See Ellsworth, R.
- Howard, J. L. See Nash, A. W.
- Howard, J. W., topaz, A., 1100.
and Castles, L., addition of chloroform and bromoform to o-chlorobenzaldehyde, A., 486.
- Howard, L. B. See Pinck, L. A.
- Howard, N. F., bean insect control, B., 246.
and Davidson, R. H., effect of heat treatment on toxicity of calcium arsenate to bean foliage, B., 742.
- Howard, N. J., ozone for treatment of water, B., 48.
- Howard, P. M. See Freudenberg, C. E.
- Howard, S. See Imperial Chem. Industries.
- Howard, W. F., Brannon, L. W., and Mason, H. C., derris and other insecticides for control of the Mexican bean beetle, B., 1012.
- Howards & Sons, Ltd., Blagden, J. W., and Clark, G. C. H., detergents and wetting-out agents, (P.), B., 619.

- Howarth, J. T., Sykes, R. F. R., and Turner, W. E. S., fundamental reactions in formation of soda-lime-silica glasses, B., 404.
- Howat, D. D. See Hay, R.
- Howatt, J. L. See MacLeod, D. J.
- Howden, P. See Brit. "Rema" Manufg. Co.
- Howden, W. H. See Howden & Co., Ltd., J.
- Howden & Co., Ltd., J., and Howden, W. H., pot annealing furnaces, (P.), B., 460.
- Howe, C. S., and Los Angeles Testing Lab., synthetic inorganic gel [for cement], (P.), B., 189.
- Howe, H. L., testing of bituminous and other [paving] mixtures, (P.), B., 903.
- Howe, J. P., and Noyes, W. A., jun., quenching of iodine fluorescence by benzene vapour, A., 1054.
- See also Duncan, A. B. F.
- Howell, E. T. See Du Pont de Nemours & Co., E. I.
- Howell, H. G., band spectrum of aluminium bromide, A., 562.
- and Rochester, G. D., new diatomic band spectra, A., 562.
- See also Rochester, G. D.
- Howell, S. F. See Sumner, J. B.
- Howells, L. T., and Electric Smelting & Aluminium Co., selecting dyes for treating goods to alter the colours thereof; [blueing of white goods], (P.), B., 449.
- Hoves, D. A. See Dunstan, A. E.
- Hoves, H. A. See Eddy, N. B.
- Hoves, H. W., Young and Thomas fractionating columns, (P.), B., 977.
- Laithwaite, H., Preston, E., and Turner, W. E. S., volatility of soda-lime-silica glasses, B., 850.
- See also Turner, W. E. S.
- Hoves, R. T., and Brucite Processes, Inc., refining of [mineral] oil, (P.), B., 485.
- and California First Nat. Bank of Long Beach, neutralisation [of acid-treated petroleum distillates], (P.), B., 441.
- Howey, J. H., effect of spin interaction in diffraction and polarisation of electrons, A., 5.
- Howland, S. W. See under Guggenheim Bros.
- Howlett, J. W. See Stokes, A. J.
- Hoyer, H. See Grüneisen, E.
- Hoyle, L. See Happold, F. C.
- Hoyt, L. F., and Larkin Co., Inc., [paste] soap, (P.), B., 641.
- and Smith, W. A., fuel composition, (P.), B., 838.
- Hoyt, S. L., ductile tungsten, B., 232, 501.
- Metallurgy of arc-deposited weld metal, B., 637.
- Hromatka, O. See Wolfes, O.
- Hrubetz, M. C., diurnal variation in blood-sugar level of the rat, A., 373.
- Adrenaline and the blood-sugar level, A., 410.
- Time curve after insulin, A., 789.
- Pituitary hormones and the blood-sugar level, A., 1424.
- and Dotti, L. B., liver-glycogen; blood-sugar level, A., 232.
- Hrudka, G., pre-defecation in beet-sugar factories, B., 1063.
- Hrynakowski, K., technique of thermal analysis in systems of three organic components, and summary of systems examined, A., 36.
- Ternary systems of organic compounds and their classification, A., 303.
- Hrynakowski, K., and Adamanis, F., thermal equilibria in ternary systems. I. Phenacetin-antipyrine-sulphonal. IV. Antipyrine-phenacetin-salol. V. Phenacetin-acetanilide-sulphonal. VI. Phenacetin-antipyrine-menthol. VII. Phenacetin-urethane-menthol. VIII. Resorcinol-pyrocatechol-quinol, A., 303, 970, 1078.
- Crystallisation in a ternary system exhibiting a peritectic and a eutectic; system antipyrine-carbamide-urethane, A., 448.
- Thermal analysis of binary systems of antipyrine and resorcinol with certain organic compounds, A., 971.
- and Adamanis, F. [with Denizot, A., and Marcinkowski, B.], thermal equilibria in ternary systems. III. Phenacetin-antipyrine-urethane, A., 704.
- and Adamanis, F. [with Kaweck, K., and Polubiński, Z.], thermal equilibria in ternary systems. II. Phenacetin-antipyrine-quinine, A., 448.
- and Szmyt, M., solid-liquid equilibria in system β -naphthol- β -naphthylamine, A., 167, 970.
- M.-p. diagrams for binary systems of bromural and veronal with salol and phenacetin, A., 582.
- Liquid-solid equilibria in the system naphthalene- α -naphthol- β -naphthol, A., 704.
- Solid-liquid equilibria in systems of three organic components. I., A., 825.
- Heterogeneous equilibria in two-component systems with thymol as one component, A., 1322.
- Solid-liquid equilibria in ternary systems in which congruently melting binary compounds are formed. II., A., 1323.
- Hsiao, C. J. See Tsai, L. S.
- Hsieh, J. L., shark-liver oil, B., 1150.
- Hsieh, K. H. See Chang, C. L.
- Hsieh, M. S., decolorising charcoal from corncoals, B., 884.
- See also Chang, K. C.
- Hsieh, Y. M. See Chang, W. Y., Meng, C. Y., and Wei, P. H.
- Hsu, F. Y., factors affecting blood glycolysis *in vitro* and *in vivo*, A., 1392.
- See also Evans, Charles Lovitt.
- Hsü, C. F. [with Wang, G. H., and Lu, T. W.], alkaloids of Hanfangchi. I. Hanfangchin A. A., 1257.
- See also Tang, T. H.
- Hsü, M. See Tseng, C. L.
- Hsü, P. C., and Adolph, W. H., distribution of calcium in leafy vegetables, A., 797.
- Hsü, T. T. See Yuan, H. C.
- Hu, M. See Tseng, C. L.
- Huang, Y., influence of sugars on growth of cultures of fibroblasts *in vitro*: morphological changes produced by such sugars. II. Hexoses; disaccharides and polysaccharides, A., 392.
- Hubbard, D. See Faick, C. A.
- Hubbard, R. S., and Brock, H. J., lactose in the plasma of pregnant and lactating women, A., 1142.
- See also Brock, H. J., and Vaughan, S. L.
- Hubbeling, J. D. W., and Amer. Enka Corp., spinning solution, (P.), B., 896.
- Hubbs, C. L., sewage treatment and fish life, B., 576.
- Huber, drying of hops, B., 424.
- Huber, A., kinetics of crystallisation processes, A., 284.
- Huber, E. See I. G. Farbenind.
- Huber, F. See Weigle, J.
- Huber, F. W., activation of adsorbent earths or clays, (P.), B., 754.
- Huber, K., somatoids. I., A., 1072.
- Hubert, B., band position of chlorophyll in different media, A., 145.
- Photodecomposition of chlorophyll, A., 421.
- Hubold, R. See Glau, K.
- Huc, P., damage to sheep pelts by crude naphthalene, B., 600.
- Bleaching of wool with hydrogen peroxide, B., 669.
- Hucker, G. J. See Bowers, C. S.
- Huddleson, I. F. See Tuttle, C. D.
- Hudeley, V. See Lagrave, J.
- Hudig, J., milling of small quantities of material for analysis, A., 321.
- Hudson, C. S. See Hann, R. M., Hockett, R. C., Jackson, E. L., Montgomery, E., and Richtmeyer, N. K.
- Hudson, E. H., purpura haemorrhagica caused by gold and arsenical compounds, A., 1160.
- Hudson, F., phosphor-bronze castings—their production, B., 411.
- Hudson, J. C., effect of five years' atmospheric exposure on breaking load and electrical resistance of non-ferrous wires, B., 360.
- Ageing of mild-steel wire, B., 634.
- Field tests on atmospheric corrosion [of steel], B., 635.
- Corrosion tests on wires by the decrease in breaking load method (second series), B., 635.
- Subsidiary paint tests [on iron surfaces] at Birmingham and Farnborough, B., 636.
- and Myers, R. H., marine corrosion [of steel]. II. Tests on steel plates built into the barge "Cactus," B., 635.
- Hübner, H. See Karner, P.
- Hückel, R. See Heubner, W.
- Hückel, W., molecular structure and rate of reaction, A., 41.
- and Gelmroth, W., configuration of alicyclic alcohols. I. Configuration of 2-ethylcyclopentanols, A., 340.
- and Goth, E., stereochemistry of dieyclic ring systems. X. Stereochemistry of hydrindane and its derivatives. II. Derivatives of *cis*-hydrindane with substituents in the six-membered ring, A., 208.
- Goth, E., and Demmler, G., cyclopentane-1,2-diacetic acid, A., 211.
- Kraemer, A., and Thiele, F., Wurtz synthesis, A., 728.
- and Kumetát, K., purification of alcohols through their *p*-nitrobenzoates; *cis*-2-decahydronaphthol, A., 80.
- Kumetát, K., and Preuss, W., configuration of alicyclic alcohols. II. Configuration and cryoscopic behaviour of alcohols, A., 745.
- Kumetát, K., and Severin, H., f.-p. depression and constitution, A., 931.
- and Lampert, U., cyclohexanedicarboxylic acids of the tartaric acid type, A., 82.
- Sachs, M., Yantschulewitsch, J., and Nerdel, F., stereochemistry of dieyclic ring systems. XI. Stereoisomerism of hexahydrohydrindenes and their derivatives. III. Hexahydrohydrindenes substituted in the five-membered ring, A., 971.
- and Schlüter, R., α -hydrinden-4-one from δ -ketosebacic acid, A., 215.
- and Wunsch, H. W., viscosity measurements on alicyclic ketones and alcohols [and their acetates], A., 925.
- Hügel, R. See Auwers, K. von.
- Hühn, R. See Reihlen, H.
- Huelsdonk, W. A., and Dickenson, C. F., disintegrator, (P.), B., 1074.

- Hueper, W. C., histochemistry of organs of tumour-bearing rats by the micro-incineration method, A., 514.
- Hürbin, M. See Ruzicka, L.
- Hüter, F., slow *versus* accelerated digestion of pulp for production of viscose, B., 445.
- Hüter, W., cathode-ray oscillograph method of investigating the Wien effect in electrolytes, A., 1462.
- Hüttig, G. F., active oxides. XCI. Active states occurring during the chemical combination of two metallic oxides, A., 1204.
- [with Meyer, Theodor, Kittel, H., and Cassirer, S.], active oxides. CXII. Interaction between solid substances, A., 1467.
- Novák-Schreiber, W., and Kittel, H., active oxides. LXXX. Characterisation of active states of system magnesium oxide-ferrie oxide by their activity in catalysing the decomposition of nitrous oxide, A., 44.
- Tschakert, H. E., and Kittel, H., active oxides. LXXXIX. Formation of zinc ferrite from zinc oxide and iron oxide, A., 1085.
- See also Meyer, Theodor.
- Huettig, H., jun., and Smyth, C. P., cryoscopic investigation of anomalies in behaviour of ethylene chloride, A., 1322.
- Huey, C. S., and Tartar, H. V., stannous-stannic oxidation-reduction potential, A., 170.
- Huf, E., effect of narcosis on water and mineral tolerance in fresh-water animals, A., 779. Relation between metabolism, potential formation, and function of frog's skin, A., 1404.
- Huff, L. C. See Universal Oil Products Co.
- Huffington, J. D., molecular latent heats, A., 690.
- Huffman, C. F. See Duncan, C. W., and Moore, L. A.
- Huffman, H. M., and Ellis, E. L., thermal data. II. Heats of combustion of *l*-cysteine, *l*-cystine, β -thiolactic acid, and $\beta\beta'$ -dithiodilactic acid. III. Heat capacities, entropies, and free energies of four organic compounds containing sulphur, A., 304.
- See also Stiehler, R. D.
- Huffman, J. R. See Vance, J. E.
- Hug, E., hypotensive action of sodium nitrite in dogs, A., 1413.
- Hugel, G., Paul, M., Boistel, M., and Soc. l'Études Chim. Appl. (S.E.C.A.), hydrogeneration of organic substances [lubricating oils], (P.), B., 617.
- Huggett, A. St. G., mechanism of anticoagulant action of azo-dyes in blood-clotting, A., 104. Pharmacological action of [food] adulterants and impurities in small quantities, B., 922.
- See also Davy, A.
- Huggins, M. L., molecular constants and potential energy curves for diatomic molecules, A., 1193.
- Hughes, A., action of snake venoms on surface films, A., 378. Unimolecular films of lecithin and related compounds, A., 442.
- Hughes, A. E. (Florida), ability of citrus fruits to withstand pressure, B., 1011.
- See also Skinner, J. J.
- Hughes, A. E. (Liverpool). See Liverpool Electric Cable Co.
- Hughes, A. H. See Schulman, J. H.
- Hughes, A. L., and Bilinsky, S., elastic scattering of electrons in krypton, A., 1185.
- and Harris, W., total scattering of electrons in helium, A., 1294.
- and Jauncey, G. E. M., radiation from the mutual annihilation of protons and electrons, A., 1294.
- Hughes, B. See Binz, A.
- Hughes, E. B., theory of Liesegang rings, A., 702. Liesegang rings, A., 1202. Liesegang rings; determination of silver, chromate, etc., in gelatin or agar gel, B., 645. Substances other than food constituents which may be present in food, B., 922.
- Hughes, E. D., mechanism of substitution at a saturated carbon atom. V. Hydrolysis of *tert*-butyl chloride, A., 452. Hydrolysis of secondary and tertiary alkyl halides, A., 710.
- and Ingold, C. K., mechanism of substitution at a saturated carbon atom. IV. Constitutional and solvent effects on the mechanism, kinetics, velocity, and orientation of substitution, A., 452.
- Juliusburger, F., Masterman, S., Topley, B., and Weiss, J., aliphatic substitution and the Walden inversion. I., A., 1465.
- See also Gleave, J. L.
- Hughes, E. H., effects of vitamin-A-deficient diets on reproduction of sows, A., 792.
- Hughes, E. W., crystal structure of cyanuric triazide, A., 286, 1451.
- Hughes, J. M. See Butler, R. C.
- Hughes, J. S. See Cave, H. W., Roepke, R. R., and Scott, H. M.
- Hughes, J. V., diffraction of β -rays; verification of de Broglie's law for very high velocity electrons, A., 275.
- Hughes, L. A. See Farmer, E. H.
- Hughes, L. M., recovering ore values, (P.), B., 502. Chloridising of ore values [roasted zinc sulphide], (P.), B., 1148.
- See also Mitchell, T. A.
- Hughes, R. H., and Wimmer, E. J., absorption of soluble, volatile fatty acids, A., 390.
- Hughes, T. P., and Dowdell, R. L., quenching steel in hot lead, B., 151.
- See also Bauer, J. H.
- Hughes, W., and Murphy, P. A., crown rot of sugar beet a boron deficiency, B., 374.
- Hughes, W. J. See Zerban, F. W.
- Hughes-Mitchell Processes, Inc. See Mitchell, T. A.
- Hugo, A. See Vallery-Radot, P.
- Huh, G. See Neber, P. W.
- Huizinga, W. J. See Coster, D.
- Hukumoto, Y., photo-dissociation of some polyatomic molecules, A., 562. Continuous absorption spectra of polyatomic molecules. V., A., 680.
- Hulač, V., and Kozák, J., composition of Malaga wine, B., 695.
- Hulbert, H. W., Spence, H. L., and Benjamin, L. V., eradication of *Lepidium draba*, B., 168.
- Hulbert, R., chlorine and the *o*-tolidine test in presence of nitrite [in water], B., 128.
- Hulett, G. A. See Johnson, C. R.
- Hull, A. W., sealing metals to glass, A., 1477.
- and Burger, E. E., glass-to-metal seals, B., 803.
- Hull, D. E., Libby, W. F., and Latimer, W. M., β -ray of actinium, A., 558, 1295.
- See also Latimer, W. M.
- Hull, G. F., jun., comparison of Raman spectra of *aaa*- and *aa\beta*-trichloroethane, A., 1301.
- Hull, L. H. See Basore, C. A.
- Hulme, A. C., nitrogen metabolism of the apple fruit. I. Determination of amino-nitrogen by the Van Slyke method in presence of tannin, A., 422.
- Hulme, H. R., electromagnetic fields due to variable electric charges and intensities of spectrum lines according to the quantum theory, A., 908.
- McDougall, J., Buckingham, R. A., and Fowler, R. H., photo-electric absorption of γ -rays in heavy elements, A., 678.
- See also Bhabha, H. J., and Jaeger, J. C.
- Hulme, P. M., Banz, P. X., and Chili Exploration Co., refining of copper, (P.), B., 999.
- Hulsmann, O., and Biltz, W. [with Meisel, K.], affinity. LXV. Tensimetric analysis of system $\text{CoS}-\text{CoS}_2$, A., 1335.
- Hulst, L. J. N. van der, determination of atomic refractions. I., A., 916. Application of absorption spectra in fatty oil research. I. and II., B., 912.
- and Henriquez, P. C., physical methods in chemistry. II. Absorption spectrum, A., 679.
- See also Henriquez, P. C.
- Hultgren, R., Gingrich, N. S., and Warren, B. E., atomic distribution in red and black phosphorus and crystal structure of black phosphorus, A., 919.
- Hulthén, L., isotope effect in band spectra of hydrides and deuterides, A., 676. Ionisation potentials calculated with the Thomas-Fermi equation and Dirac exchange correction, A., 1185.
- Hulton, H. F. E. See Baker, J. L.
- Hultzsch, K. See Fischer, F. G.
- Hulubei, H., X-ray evidence of deformation in a crystal lattice under the action of an electric field, A., 811. Emission [of subsidiary lines] in the *K α* spectra of the elements between Cu (29) and Rh (45) inclusive, A., 1439.
- and Cauchois, (Mlle.) Y., crystal spectroscopy with γ -rays, A., 58.
- Humber, C. M. See Ardagh, E. G. R.
- Humbert, L. C. See Sterkers, E.
- Hume, W. F., Harwood, H. F., and Theobald, L. S. [with Awad, A. I.], analysis of Egyptian igneous and metamorphic rocks, A., 323.
- Hume-Rothery, W., lattice parameters of solid solutions in silver, A., 919.
- and Powell, H. M., theory of superlattice structures in alloys, A., 1456.
- Humeau, R. See Cornubert, R.
- Humm, W., determination of working properties of mortar and concrete, B., 229.
- Hummitzsch, W. See Rapatz, F.
- Humnicki, V., ischolesterol, A., 210.
- Humphrey, I. W. See Hercules Powder Co.
- Humphreys, E. W. A., and Humphreys, P. H. I., sedimentation apparatus or thickeners, (P.), B., 977.
- Humphreys, P. H. I. See Humphreys, E. W. A.
- Hun, (Mlle.) O., cryoscopic study of total hydration of ions of sodium bromide, A., 1459.
- See also Bourion, F.

- Hund, F., electrostatic energies of ionic lattices, A., 685.
- Hund, W. J., thymol, (P.), B., 621.
- and Rosenstein, L., treatment of alkylol-amine soaps and related products, (P.), B., 109.
- Hundrieser, M. See Orzechowski, G.
- Hundscheidt, H., calcium in supersensitivity to insulin, A., 789.
- Hundt. See Richter.
- Hungerland, H., effect of clamping the large arteries on composition of the urine, A., 1400.
- Hunn, S. C. See Ridge, H. M.
- Hunold, G. A., preparation and properties of nitromethane and nitrosobutylglyceryl trinitrate, B., 1024.
- Hunscher, H. A., Donelson, E., Erickson, B. N., and Macy, I. G., results of ingestion of cod-liver oil and yeast on calcium and phosphorus metabolism of women, A., 243.
- See also Barnes, D. J.
- Hunsdiecker, H., mother-of-pearl effects in artificial plastic substances and paints and lacquers, (P.), B., 511.
- and Vogt, Egon, [baths for] treatment of textile materials, (P.), B., 263. Preparation of dispersions, (P.), B., 263, 665. Treatment of fibrous materials, (P.), B., 449. Treatment of textile materials, (P.), B., 589. Treatment of textile materials and preparation of dispersions, (P.), B., 627. Treatment of vegetable, animal, and artificial fibrous materials, (P.), B., 627.
- Hunt, B. See Ferguson, M. C.
- Hunt, H. See Larsen, W. E.
- Hunt, H. M. See Carey, H. N.
- Hunt, J. K., and Lansing, W. D., coating composition films; physical properties and durability, B., 598.
- See also Du Pont de Nemours & Co., E. I.
- Hunt, M., and Marvel, C. S., reaction between sulphur dioxide and olefines. II. Propylene, A., 1349.
- Hunt, M. H. See Westinghouse Electric & Manuf. Co.
- Hunt, M. J. See Morgan, A. F.
- Hunter, A., temperature coefficient and apparent energy of activation of enzymic hydrolysis of arginine; stability of arginase under various conditions, A., 405.
- Hunter, D., deficiencies in nutrition, A., 892.
- Hunter, E. See Clark, L. M.
- Hunter, J. See Hunter, R. A.
- Hunter, J. H. See Jordan, H. V.
- Hunter, J. S., photo-electric fatigue and oxidation, A., 682.
- Hunter, J. W. See Freeman, Horace.
- Hunter, L. N. See Novotney, T. A.
- Hunter, M. P. See Fairley, T. J.
- Hunter, R. A., and Hunter, J., manufacture of a preparation or medium for treating tuberculous and other conditions of the thorax, (P.), B., 287.
- Hunter, R. F., and Samuel, R., chemical linking, A., 150. Interpretation of the parachor, A., 283. Valency, A., 810, 917.
- See also Ahmad, B., Bukhsh, M. W., Desai, R. D., and Farooq, M. O.
- Hunter, R. S., reflexion measurements on pulp and paper, B., 764.
- and Gardner, H. A., gloss-measuring device, (P.), B., 1077.
- Hunter, S., wet screening of coal and other materials, (P.), B., 387.
- Hunter, T. G., and Nash, A. W., liquid-liquid extraction systems; computations for solvent refining of oils, B., 756.
- See also Fallah, R.
- Hunter, W. J. See Fairley, T. J.
- Huntington, R. L., and Brown, G. G., laboratory [oil]-cracking data as a basis for plant design, B., 709.
- See also Pyott, W. T.
- Huntsman, M. E. See Best, C. H.
- Huntzicker, H. N. See Traxler, R. N.
- Hunwicke, R. F., bacterial solutions, (P.), B., 524.
- Hunyady, S., production of aluminium oxide, etc., [from bauxite], (P.), B., 270.
- Hard, C. B., and Moore, G. A., jun., thermal dissociation of lithium hydride, A., 447.
- Hurd, C. D., and Christ, R. E., *p*-bromophenacyl formate, a solid derivative of formic acid, A., 1498.
- Dull, M. F., and Williams, J. W., decomposition of acetylphthalimide, A., 748.
- Hurd, C. H., and Parrish, C. I., unsaturated ethers of pyrogallol, A., 1362.
- Hurd, L. C., and Reynolds, F., cyclohexanol in colorimetric determination of molybdenum, A., 56.
- Hurd-Karrer, A. M., absorption of selenium from soils by plants, B., 688.
- Hurgin, J. L. See Lukirski, P. I.
- Hurlburt, M. H. See Himwich, H. E.
- Hursh, R. K. See Moore, D. G.
- Hurst, A. F., dosage above the pharmacopoeial maximum, A., 243.
- Hurst, C., radioactivity of potassium, A., 802.
- Hurst, D. G. See Watson, W. H.
- Hurst, J. E., alloy cast irons, B., 593. Duplicating intrinsic properties of cold-blast pig iron, B., 1046. Elastic properties of specimens of mild steel, B., 1047.
- Hurst, L. A., and Skuderna, A. W., fertiliser studies with sugar beet in the Arkansas Valley area, Colo., 1921-1928, B., 199.
- Hurst, M. E., vein formation at Porcupine, Ontario, A., 602.
- Hurtado, A., Kaltreider, N., and McCann, W. S., respiratory adaptation to anoxemia, A., 371.
- Hurtig, G. See Dilthey, W.
- Hurukawa, T. See Sakurada, I.
- Husa, W. J., and Fehder, P., drug extraction. IV. Effect of variation in solvents on extraction of jalap, B., 1068.
- and Huyck, C. L., drug extraction. II. Effect of fineness of powder and of variation in solvents on percolation of belladonna root, B., 876.
- and Magid, L., drug extraction. I. Swelling effect, penetration, and extraction by various menstrua, B., 252.
- and Yates, S. B., drug extraction. III. Function of preliminary maceration in relation to percolation of belladonna root, B., 973.
- Husain, S. See Kantikar, R. R., and Murti, C. N.
- Huscher, M. E. See Dow Chem. Co.
- Husemann, C., potassium requirement of old high-moor meadows, B., 324.
- See also Brüne, F.
- Husemann, E. See Staudinger, H.
- Husimi, K. See Kikuchi, Seishi.
- Hussa, E., vigantol in tuberculosis therapy, A., 519.
- Husse, W., use of rust-resistant paints, B., 464.
- Hussey, A. V., history of "ciment fondu," B., 357.
- Hussey, R., and Thompson, W. R., effects of radiations on biological systems. II. Immediate and subsequent effects of X-irradiation on respiration of *Drosophila* larvae, A., 1023.
- Huston, R. C., and Goodemoot, K., effect of strain in cycloalkylcarbinols on their reactivity with benzene in presence of aluminium chloride, A., 80.
- Huszák, S., significance of fumaric acid in respiration of animal tissues. VII. Experiments *in vivo*, A., 1406.
- Hutchings, P. J. See Andrade, E. N. da C.
- Hutchins, T. C., causes of unevenness in printing with naphthol AS colours, B., 989.
- Hutchinson, H. P., and Kearns, H. G. H., control of the brassy willow beetle (*Phyllodecta vitellina*, L.), with reference to use of dusts, B., 822.
- Hutchinson, J. C. D. See Chick, H.
- Hutchison, W. K. See Gas Light & Coke Co., and Hollings, H.
- Hutchisson, E., and Robinson, A. L., single electrode potentials and the e.m.f. of a cell, A., 169.
- Huter, J. See Simon, Arthur.
- Hutin, A., determination of concentration of sulphur chloride for vulcanising baths, B., 816.
- Hutino, K., and Sakurada, I., penetration of pyridine and methyl alcohol into the lattice of cellulose, A., 687.
- See also Sakurada, I.
- Huttenlocher, H. F., crystal structure of aluminium orthophosphate AlPO_4 , A., 1194.
- Hutton, C. O., metallic sulphides in Shot-over River district, A., 322.
- See also Turner, F. J.
- Hutton, E. A. See Denham, W. S.
- Hutton, H. W., dispersion of synthetic resins in liquids, (P.), B., 34.
- Hutton, M. K. See Daniels, A. L.
- Huyck, C. L. See Husa, W. J.
- Hveding, J. See Hansen, K.
- Hvidberg, I., reproducible process for accurate photomicrography of dispersions, with special reference to examination of bituminous emulsions for road construction, A., 1340.
- Hwang, L. See Yu, T. F.
- Hyde, C. G., coagulation with ferric chloride, B., 607.
- Hyde, G. G., and Dorr Co., Inc., sewage-grit treatment, (P.), B., 80.
- Hyde, J. F., and Corning Glass Works, electrically conducting coating on vitreous substances [glass], (P.), B., 902.
- Hyde, R. R. See Allisbaugh, H. C.
- Hyden, W. L. See Charch, W. H.
- Hydraulic Brake Co. See Tseng, A. T. K.
- Hydrocarbon Processes, Inc. See Lelgemann, W.
- Hydrotator Co. See Remick, W. L.
- Hykeš, O. V., and Diakov, F. A., antagonistic effect of potassium iodide in baldness due to thallium acetate, A., 1533.
- and Reřábek, J., radium emanation and elimination of phosphorus by frog's muscle, A., 1023.
- Hyler, J. E., production of salt, B., 848.

- Hylleraas, E. A., theory of free radicals and organo-alkali compounds, A., 810. Heavy hydrogen and heavy water, A., 832. Energy formula and potential distribution of diatomic molecules, A., 1305. Potential curve for diatomic homopolar molecules; application to CdH and N₂, A., 1448. Analytical representation of the potentials of diatomic molecules and their determination from spectroscopic data. I. General theory. II. Application to CdH and N₂, A., 1448.
- Hylmar, H. See Dolejšek, V.
- Hyman, A. J. See Veen, A. G. van.
- Hyman, I., and Velsical Corp., emulsifiable oxidised hydrocarbon, (P.), B., 345.
- Hypher, N. C., X-ray inspection of magnesium castings, B., 552.

I.

- *I. G. Farbenind. A.-G., acenaphthylene, (P.), B., 348. Acetaldehyde from acetylene, (P.), B., 620. Acridinium compounds [pharmaceuticals], (P.), B., 1069. Compounds of acridinium series, (P.), B., 124. Adhesives, (P.), B., 963. Effecting adhesion or cementing of the surfaces of materials [wood], (P.), B., 1144. Alcohols of high mol. wt., (P.), B., 938. Alkali-cellulose, (P.), B., 1040. Ripening of alkali-cellulose, (P.), B., 96. Alkali hydroxide solutions, (P.), B., 305. Complex compounds of alkali- and alkaline-earth-metal halides with amines, (P.), B., 1165. Alkali-metal and ammonium nitrates, (P.), B., 146. Alkali nitrate from calcium nitrate and alkali chloride, (P.), B., 146. Improving resistance to corroding agents of aluminium-base alloys, (P.), B., 1000. Aluminium-base alloys containing magnesium, (P.), B., 157. Improvement of aluminium-magnesium alloys, (P.), B., 957. Separation of components of alloys of copper and silver, (P.), B., 999. Modifying mechanical properties of light-metal alloys, (P.), B., 909. Pulverulent metal alloys [for dust cores], (P.), B., 505. Reaction products of acid amides, fatty acids, and aliphatic hydroxy-compounds [with glycid], (P.), B., 139. Acid amide[alkylene oxide] derivatives, (P.), B., 139. Amines, (P.), B., 139, 487. Amines and amides, (P.), B., 218. *sec.*- and *tert.*-Amines, (P.), B., 665. Aliphatic amines, (P.), B., 262. Reaction products of aliphatic amines [with glycid] [textile assistants], (P.), B., 92. *sec.*- or *tert.*-Aromatic [or cycloaliphatic] amines, (P.), B., 665. Catalytic manufacture of nuclear-substituted aromatic amines, (P.), B., 218. Aminoalkylated amines, (P.), B., 940. α -Aminoanthraquinones, (P.), B., 141. Heterocyclic amino-compounds, (P.), B., 444. Amino-pyrenesulphonic acids, (P.), B., 985. Neutral, water-soluble derivatives of aminoarylsarseno-stilbio-compounds and organo-metallic [aminoarylsarseno-metalloid] compounds, (P.), B., 124. Amino-substituted organic arsenic compounds, (P.), B., 830. Pure 1-amino-2,3-dimethylanthraquinone, (P.), B., 263. Alkyl derivatives of ammonia [aryl-

- *I. G. Farbenind. A.-G.—*continued.* alkylamines], (P.), B., 218. Manufacture and application of quaternary ammonium compounds, (P.), B., 396, 1132. Solutions of liquid anthelmintics, (P.), B., 749. Compounds of the anthraquinone series, (P.), B., 487. Anthraquinone derivatives [dyes], (P.), B., 797. Derivatives of the anthraquinone series containing nitrogen and sulphur, (P.), B., 762. Anthraquinone-acridone derivatives, (P.), B., 220. 1:2:2':1'-Anthraquinonoanthraquinones, (P.), B., 585. Substitution or condensation products of anthrones, (P.), B., 985. Neutral, water-soluble complex compounds of tervalent antimony, (P.), B., 125. 1-Azanthraquinone and its derivatives, (P.), B., 585. Azo-dyes, (P.), B., 94, 141, 841. Azo-dyes [pigments for lacquers, waxes, etc.], (P.), B., 1086. Azo-dyes insoluble in water [pigments for rubber], (P.), B., 797. [Blue] azo-dyes on the fibre [ice colours], (P.), B., 989. [Chromable] azo-dyes, (P.), B., 895, 1037. Insoluble azo-dyes on the fibre, (P.), B., 224. [Oil-soluble] azo-dyes, (P.), B., 895. Azo-dyes insoluble in water [pigments and ice colours], (P.), B., 220, 264, 349, 763, 842, 1086. Water-insoluble azo-dyes [ice colours and pigments] and of intermediates therefor, (P.), B., 763. [Direct yellow] azo-dyes, (P.), B., 762. Yellow azo-dyes capable of being chromed, (P.), B., 941. Azo-dyes containing copper, (P.), B., 842. Azo-dyes containing copper in a complex form, (P.), B., 763. Azo-dyes containing metal, (P.), B., 1134. Azo-dyes containing a heavy metal in complex form, (P.), B., 220. Azo-dyes [for wool], (P.), B., 717. [Bactericidal] azo-compounds, (P.), B., 839. [Oil-soluble] organic bismuth compounds [bactericides], (P.), B., 701. Barbituric acid derivatives, (P.), B., 1165. Non-knocking benzines, (P.), B., 180. Bituminous constructional material, (P.), B., 994. Bituminous emulsions, (P.), B., 891, 1083. [Butadiene] polymerisation products, (P.), B., 33. Hydrocarbons of high mol. wt. from isobutylene, (P.), B., 182. Polymerisation products of high mol. wt. from isobutylene, (P.), B., 893. Carbamide-formaldehyde condensation products, (P.), B., 1005. Heterocyclic compounds [carbazoles], (P.), B., 1134. Lining apparatus for thermal treatment of carbonaceous materials, (P.), B., 342. Thermal treatment of carbonaceous substances, (P.), B., 935. Carboxylic acid aryl[am]ides, (P.), B., 14. Products [salts] from polymeric carboxylic acids, (P.), B., 264. [Ester-like] conversion products of casein, (P.), B., 93. Manufacture of shaped catalysts by mechanical pressing, (P.), B., 803. Carrying out catalytic reactions [hydrogenation of carbonaceous materials], (P.), B., 55. Carrying out catalytic reactions with improved sulphide catalysts, (P.), B., 1082. Electrolytic cells [for preparing alkali-metal amalgam from alkali chlorides], (P.), B., 237. Treatment of cellulose esters in alkaline liquors, (P.), B., 1042. Solid product

- *I. G. Farbenind. A.-G.—*continued.* containing available chlorine and highly insensitive to temperature, (P.), B., 226. Compositions comprising chlorinated organic substances, (P.), B., 13. 3-Chloro-2-acetamidoanthraquinone, (P.), B., 487. 1-Chloro-2-methylanthraquinone, (P.), B., 487. [Chrome] azo-dyes, (P.), B., 14. Coating absorbent materials [e.g., leather], (P.), B., 513. Coating of articles with rubber, (P.), B., 1104. Colouring of organic solvents, lacquers, fats, oils, resins, waxes, and products obtained therefrom, (P.), B., 847. Condensation products of the aromatic series, (P.), B., 183. Nitrogenous condensation products, (P.), B., 219, 348, 622. Condensation products [from polypeptides and chloroformic esters], (P.), B., 487. Cosmetic preparations, (P.), B., 976. Protective cosmetic preparations, (P.), B., 1120. Cyanine dyes, (P.), B., 298. Diacetyl, (P.), B., 218. *N*[*N'*-Di-]substitution products of 1:4-diaminoanthraquinones, (P.), B., 1134. 1:4-Diaminoanthraquinone-2:3:3'-trisulphonic acids, (P.), B., 94. Water-soluble diaziminocompounds, (P.), B., 622. Diazonium compounds from 4-aminodiarlylamines, (P.), B., 985. Condensation products [dibenzanthrene], (P.), B., 93. 4:8-Dihydroxy - 1:2:5:6 - dibenzophenazines [6:13-dihydroxy- $\alpha\beta'\beta\alpha'$ -dinaphthazines] and azo-dyes therefrom, (P.), B., 219. Compounds of diphenylamine-sulphone series, (P.), B., 140. Disazo-dyes [for acetate silk], (P.), B., 796. Disazo[chrome] dyes and intermediates, (P.), B., 220. [Direct dis]azo-dyes, (P.), B., 941. *o*-Disazo-dyes insoluble in water [pigments and ice colours], (P.), B., 1086. Complex metal compounds of [disazo]-dyes, (P.), B., 1134. Disinfectants, (P.), B., 704. Dye preparations, (P.), B., 941. Stripping of dyes, (P.), B., 1042. Dyes for colouring organic masses capable of being moulded, (P.), B., 57. Dyes [for wool, silk, and lacquers], (P.), B., 942. Dyes of the anthraquinone series, (P.), B., 141, 349, 895. Dyes [of the anthraquinone series] for animal fibres, (P.), B., 140. [Acid] dyes of the anthraquinone series, (P.), B., 941. Acid wool dyes of the anthraquinone series, (P.), B., 1086. Dyes of the oxazine series, (P.), B., 942. Organic dyes [containing polyethylenoxy-groups], (P.), B., 349. [Acid] dyes [of the quinophthalone series], (P.), B., 985. Dyes [of the stilbene series], (P.), B., 985. Asymmetrical dye of the thio-indigo series [6-methoxy-6'-ethoxythio-indigo], (P.), B., 764. Dyes of the triarylmethane series, (P.), B., 94, 219. Dyeing of pelts, furs, etc., (P.), B., 145. Embedding mass for dental purposes, (P.), B., 727. Unsaturated esters, (P.), B., 796. Fabrics printed with vat dyes, and their development, (P.), B., 185. Apparatus for developing fabrics printed with vat dyes, (P.), B., 303. Fulling of fabrics, (P.), B., 19. Fertilisers, (P.), B., 517. Fertilisers from carbonaceous material, (P.), B., 248. Mixed fertilisers containing lime, (P.), B., 778. Films from solutions of cellulose acetate, (P.), B., 266.

*I. G. Farbenind. A.-G.—continued.

Films, threads, etc., [from polyvinyl compounds], (P.), B., 111. Films, threads, and shaped articles [from plastic masses], (P.), B., 1154. Fire-proof [organic fibrous] material, (P.), B., 670. Rot-proof fishing nets or tackle, (P.), B., 304. Preservation of green fodder, (P.), B., 286.

Gasification of fine-grained fuels, (P.), B., 260. Removal of weak gaseous acids from gases, (P.), B., 55, 793. Separation of ammonia and hydrogen sulphide from gases, (P.), B., 837. [Phosphate] glass permeable to ultra-violet light and stable to irradiation, (P.), B., 406. Glued or stuck materials, (P.), B., 513. Glueing or sticking, (P.), B., 1059. Glyoxalidenearyluethylois [hydroxy- or alkoxy-phenyl-2-glyoxalidylcarbinols], (P.), B., 287.

Halogenoamine alkylsulphuric esters or alkylsulphonic acids [bleaching agents], (P.), B., 620. Soaking of [raw] hides, (P.), B., 864. Hormone preparations, (P.), B., 1068. Hormones of suprarenal cortex, (P.), B., 1118. Hydrocarbons from heat treatment of carbonaceous materials, (P.), B., 891. Hydrocarbons of low b.p. from heat treatment of oils of high b.p., petroleum residues, tars, etc., (P.), B., 344. Hydrocarbons of low b.p. from heat treatment of mixtures of oils, (P.), B., 89. Aromatic hydrocarbons of low b.p. from hydrogenating coal-tar fractions, (P.), B., 793. Liquid hydrocarbons from thermal treatment of carbonaceous materials, (P.), B., 891. Hydrocarbon oils from treatment of distillable carbonaceous materials at elevated temperatures and in presence of catalysts and surface-active materials, (P.), B., 936. Condensation and polymerisation products of hydrocarbons [containing paraffin wax], (P.), B., 13. 1-Hydroxy-4-alkoxyanthracenes, (P.), B., 762. Complex metal compounds of *o*-hydroxyazo-dyes, (P.), B., 14. Hydroxydiphenylene compounds and derivatives thereof, (P.), B., 585, 621.

Illuminating gas, (P.), B., 936. [Bronze] printing inks, (P.), B., 511. Agents for combating insects, (P.), B., 976. Insulation of electric conductors, (P.), B., 1148.

Lacquers and plastic masses, (P.), B., 961. [Coloured] lacquers from cellulose esters, (P.), B., 240. Extraction of lipoids and other substances having the character of fats from animal and vegetable organisms, (P.), B., 1150. Lubricants, (P.), B., 1127. Lubricant compositions, (P.), B., 1127. Lubricating oils, (P.), B., 346, 441, 538, 1034. High-quality lubricating oils, (P.), B., 217. Hydrocarbon lubricating oils, (P.), B., 937. Synthetic lubricating oils, (P.), B., 759.

Magnesium hydroxide, (P.), B., 1092. Magnet cores, (P.), B., 879. Protection of medicaments from action of stomach juices, (P.), B., 750. Liquid medicinal preparations, (P.), B., 973. Organo-mercury compounds, (P.), B., 655. Metal salts of polymeric carboxylic acids and shaped articles therefrom, (P.), B., 162. Heavy-metal complex com-

*I. G. Farbenind. A.-G.—continued.

pounds of mercaptopyrimidines, (P.), B., 750. Methylamines, (P.), B., 182. Mono- and di-methylamine, (P.), B., 262. Methyl chloride, (P.), B., 618. Recovery of molybdenum [from spent catalysts], (P.), B., 495. Building mortars, etc., containing caoutchouc, (P.), B., 994. Products for protection of animal fibres from textile pests [moth-proofing], (P.), B., 267.

Naphthalene-1:4:5:8-tetracarboxylic acid, (P.), B., 263. Nitroarylamino-arylamines, (P.), B., 665. Nitrogenous condensation products, (P.), B., 841.

Oils from liquids or meltable solid carbonaceous materials composed of constituents having different solubilities in light hydrocarbon solvents, (P.), B., 838. Oil varnishes, (P.), B., 195. Olefine chlorides, (P.), B., 618. Organic compounds containing alkyl radicals of high mol. wt., (P.), B., 1131. Organic disulphides, (P.), B., 1037. Stabilised [organic] preparations, (P.), B., 894. Oxazine dyes, (P.), B., 141.

Paints, lacquers, and varnishes, (P.), B., 466. Unsymmetrical pentaerythrocyanine dyes, (P.), B., 1037. Perylene, (P.), B., 443. [Agents for] destruction of pests, (P.), B., 608. Preparations for combating animal pests, (P.), B., 288. Recovery of fatty acids or their salts [from oxidation of petroleum products], (P.), B., 939. Pharmaceutically valuable substances [diaminocarboxylic acids], (P.), B., 254. Aliphatic diamino-carboxylic acid derivatives [pharmaceuticals], (P.), B., 205. Photographic baths, (P.), B., 783. Photographic bleaching-out layers, (P.), B., 879. Sensitisation of photographic emulsions, (P.), B., 79, 334, 526. Stabilisation of photographic emulsions, (P.), B., 126. Sensitisation of photographic silver halide emulsions, (P.), B., 334, 783, 975. Sensitisation of photographic silver halide emulsions and manufacture of sensitising dyes therefor, (P.), B., 975. Development of silver halide emulsions and photographic material therefor, (P.), B., 925. Sensitisation of silver halide emulsion layers, (P.), B., 46. Sensitisation of silver halide gelatin emulsions, (P.), B., 1069. Fixing of photographic films on rigid supports, (P.), B., 1023. Lenticular photographic film, (P.), B., 1119. Photographic material, (P.), B., 255. Light-sensitive photographic material, B., 525. Photographic pictures of high brilliancy, (P.), B., 255. Photographic printing of lenticular colour-record films, (P.), B., 1167. Photographic sensitisers, (P.), B., 334. Photographic sensitising dyes, (P.), B., 175. Photographic supports from cellulose derivatives, (P.), B., 491. Rapid process of photography applicable in television and for other purposes, (P.), B., 831. Colour photography, (P.), B., 783, 1167. X-Ray photography, (P.), B., 925. Physiologically active preparation from embryonal tissue, (P.), B., 287. Agents for combating plant diseases, (P.), B., 969. Plastic masses, (P.), B., 279. Colouring of water-insoluble plastic masses, (P.), B., 626. [Resist-]printing of textile

*I. G. Farbenind. A.-G.—continued.

materials, (P.), B., 225. 5-Pyrazolone derivatives [pharmaceuticals], (P.), B., 974.

Quinones, (P.), B., 796.

Resinous condensation products, (P.), B., 161, 418. Conversion products from natural resins and derivatives thereof, (P.), B., 467. Construction and treatment of road and similar surfaces, (P.), B., 994. Vulcanisation of rubber and artificial rubber-like masses, (P.), B., 738. [Accelerators for] vulcanisation of rubber, (P.), B., 468. Rubber derivatives, (P.), B., 34. Rubber mixtures, (P.), B., 1006. Masses similar to soft rubber, (P.), B., 468. Artificial [rubber-like] masses, (P.), B., 195. Rubber-like products from olefine halides and polysulphides of the alkali or alkaline-earth metals, (P.), B., 280. Coloured rubber products, (P.), B., 862. Stabilised chlorinated rubber, (P.), B., 738. Products containing chlorinated rubber, (P.), B., 1105. [Chlorinated rubber] film-forming compositions, (P.), B., 735. Preparation for preventing or destroying rust on cultivated plants, (P.), B., 823.

Silk, artificial, threads, sheets, ribbons, etc., (P.), B., 1040. Drying artificial silk, (P.), B., 17. Joint production of a caustic soda lye, poor in sodium chloride, and of Glauber salt, (P.), B., 269. Sodium dichromate, (P.), B., 494. Sols and highly disperse suspensions containing oxidic metal compounds, (P.), B., 226. Masses [sound records] containing metals in a fine state of dispersion, (P.), B., 162. Sulphur, (P.), B., 948. Organic sulphur compounds, (P.), B., 620. Sulphur dye preparations, (P.), B., 1135. [Solid] sulphur dye preparations, (P.), B., 95. Violet sulphur dyes, (P.), B., 15.

Tanning agents, synthetic, (P.), B., 564, 777. [Light-fast] synthetic tanning agents, (P.), B., 469. Preparations and liquors for washing textiles, (P.), B., 303. Oiling of textile fibres, (P.), B., 801. Treatment of textile material, (P.), B., 847. Improvement [crease-proofing] of textile materials, (P.), B., 542. Delustering of textile materials, (P.), B., 460. Dressed textile materials, (P.), B., 848. Solutions of therapeutically valuable compounds, (P.), B., 206. Therapeutically active substances [resembling glycogen], (P.), B., 749. Thiocarbamide compounds, (P.), B., 140. *iso*Thiocyanate sulphonic acids, (P.), B., 263. [Self-supporting winding in] manufacture of artificial threads, etc., (P.), B., 1041. Treatment [washing, etc.], of artificial threads, (P.), B., 1138. Trialkylamines, (P.), B., 1130. [Triarylmethane] dyes, (P.), B., 895. Trimethylamine, (P.), B., 762, 1130. Basic triphenylmethane dyes soluble in water, (P.), B., 762. Trisazo-dyes, (P.), B., 941. [Direct black tris]azo-dyes, (P.), B., 717.

Vat dyes, (P.), B., 15. [Vat] dye preparations, (P.), B., 1037. Vat dyes [of the dibenzanthrone series], (P.), B., 95. Vat dyes [of the naphthylenebis-aryliminazole series], (P.), B., 1135. Vat dye [of the perylene series], (P.), B., 985. Halogenated vat dyes [of the benzanthrone series], (P.), B., 397.

***I. G. Farbenind. A.-G.—continued.**

- Water-soluble derivatives of vat dyes and preparations containing the same, and application of the products in dyeing and printing, (P.), B., 941. Vat and sulphur dye preparations for textile printing, (P.), B., 95, 766. Vat dye-baths, (P.), B., 722. Yellow acid sulphuric esters of leuco-derivatives of vat dyes, (P.), B., 717. [Levelling agents for] dyeing with vat dyes, (P.), B., 1140. Vinyl ethers, (P.), B., 548, 761, 795. Artificial products from viscose, (P.), B., 17. Articles from viscose-sponge masses, (P.), B., 1041. Vitamin preparation, (P.), B., 524.
- Washing, wetting, dressing, and similar agents, (P.), B., 487. [Water-containing] wax emulsions, (P.), B., 1150. Weed-killing preparations, (P.), B., 168. Wetting and similar agents for the textile industries, (P.), B., 1131. Wet-ting, cleansing, dispersing, and similar agents, (P.), B., 1131. Wetting, washing, and dispersing agents, (P.), B., 939. Dyeing of wool, (P.), B., 766. Wool-like artificial fibres, (P.), B., 351, 1138. [Xanthone and thioxanthone] dyes, (P.), B., 141.
- and Dilthey, W., phenylated aromatic and hydro-aromatic hydrocarbons and derivatives thereof, (P.), B., 1133.
- Dohse, H., and Schuster, C., 1:3:5-trimethylbenzene [mesitylene], (P.), B., 840.
- and Groves, W. W., shaped articles from metal salts of polymeric carboxylic acids, (P.), B., 162. Photographic articles, (P.), B., 382. Aminopyrene-sulphonic acids, (P.), B., 985.
- and Internat. Hydrogenation Patents Co., Ltd., destructive hydrogenation of carbonaceous materials and recovery of oils from the residues of said treatments, (P.), B., 88. Improvement of motor fuels having a tendency to form pitchy residues, (P.), B., 181. Non-knocking benzines, (P.), B., 261. Production of liquid hydrocarbons by heat treatment of liquid hydrocarbons containing unsaturated compounds in presence of hydrogenating gases, (P.), B., 344. Separation of oils from mixtures thereof with solid matter and asphalt, obtained as residues in the destructive hydrogenation of distillable carbonaceous materials, (P.), B., 393. Destructive hydrogenation of solid carbonaceous materials, (P.), B., 393, 583. Production of liquid hydrocarbons from hydrocarbon mixtures which contain unsaturated compounds, (P.), B., 441. Production of lubricating oils by heat treatment of solid carbonaceous materials in presence of hydrogenating gases, (P.), B., 583. Production of liquid hydrocarbons by destructive hydrogenation of solid carbonaceous materials, (P.), B., 712. Destructive hydrogenation of carbonaceous materials, (P.), B., 837. Catalytic destructive hydrogenation under pressure of solid carbonaceous materials, (P.), B., 935. Production of liquid hydrocarbons by heat treatment of liquid hydrocarbons containing unsaturated compounds, or resins or asphalt, in presence of hydrogenating gases, (P.), B., 983.
- I. G. Farbenind. A.-G., Jaeger, M., and Espig, H., synthetic precious stones [spinels], (P.), B., 454.
- and Schreiber, G., riveted plated-aluminum article, (P.), B., 315.
- Soc. Chem. Ind. in Basle, Geigy A.-G., J. R., and Chem. Fabr. vorm Sandoz, determination of light-fastness, B., 1090.
- Stadler, R., and Eisenhut, O., carrying out chemical reactions between gas-like substances, (P.), B., 773.
- Vogt, W., and Huber, E., dyes of the azine series, (P.), B., 1134.
- Wappes, H., and Klingenberg, H., [casein] adhesives, (P.), B., 740.
- Iao, L. O. See Liang, T. H.
- Iba, K., mechanism of action of strychnine or the combination of it with cardiac tonics on the isolated heart of *Rana esculenta*, A., 893. Mechanism of strychnine action or its combination with uterus tonics on the isolated rabbit uterus, A., 1410.
- Iball, J., crystal structure of dodecahydrobenzanthracene, A., 1061.
- See also Cook, James Wilfred, and Owen, E. A.
- Ibing, G. See Koch, Herbert.
- Ichaporia, M. B. See Shah, R. C.
- Ichiba, A., phytosterol of wheat-germ oil, A., 1551. Phytosterolin of wheat-germ. II., A., 1551.
- Ichijō, M., sugar content of human amniotic fluid and occurrence of fructose, A., 378.
- Ichikawa, C., manganese compounds in Japanese soils; relation of manganese compounds to soil fertility, B., 115. Relation of soil fertility and exchangeable acidity, B., 1059.
- See also Matsuno, T.
- Ickes, T. See Embden, G.
- Iddles, H. A., and Jackson, Carroll B., determination of carbonyl compounds by means of 2:4-dinitrophenylhydrazine, A., 101.
- Ide, J. M., dynamic methods for determination of Young's modulus, A., 1476.
- Ide, W. S. See Hjort, A. M.
- Idelichik, B. M. See Skorcheletti, V. V.
- Idzerda, J., hygienic investigation of swimming-bath water, B., 80.
- Ievinš, A., determination of calcium as oxide, A., 1338.
- Igawa, S. See Watanabe, Susumu.
- Igel, H. See Brüne, F.
- Ignatieva, V. N., corrosion of lead in sulphuric acid towers and chambers, B., 20.
- Ignatiuk-Majstrenko, V. A., and Tichonov, N. S., preparation of 3:6-dicarboxybenzoyl-N-ethylcarbazole, A., 223.
- Ignatovich, M. I. See Tischtschenko, V. E.
- Ignatovskaja, I. T. See Nikiforov, L.
- Iguchi, K. See Takahashi, E.
- Ihrig, H. K., rendering concrete gastight, (P.), B., 456.
- Iida, T. See Winokuti, K.
- Iijima, S., sorption of hydrogen by reduced nickel. IV. Velocity of sorption of hydrogen at the early stage, A., 293.
- Iijima, T., relation between castration and blood pressure in rabbits, A., 1401.
- Iimori, S., Yoshimura, J., and Hata, S., radon content of mineral springs of Korea, A., 60.
- Iinuma, H. See Nakatsuka, Y.
- Iio, T., and Tsushima, K., silver nitrate reaction with urine, A., 513.
- Iitaka, I., independence of grain size and dendrite fineness [of alloys], B., 192.
- Aoki, Y., and Yamanobe, T., beryllium. I., A., 1216.
- and Miyake, S., oxide film of alloys containing small percentages of aluminum, B., 997.
- Ikebe, S., surface anaesthesia of the outer ear passage of guinea-pigs, A., 1410.
- Ikeda, G., chemistry of the intestine. I. Intestinal juice. II. Perfusion of the intestine with urea. III. Perfusion of the intestine with glycine. IV. Perfusion of the small intestine with D-alanine, A., 112.
- Ikeda, R. See Suzuki, U.
- Ikheizon, S. M. See Kantor, L. A.
- Iki, T. See Sahashi, Y.
- Ikuma, S. See Ochiai, E.
- Ikuo, S. See Kameyama, N.
- Ikuta, A., glycogen and lactic acid in cartilage, A., 1264.
- Ilford, Ltd. See Levy, L. A.
- Ilfra Corporation, Ltd., and Pickett, F. N., ebonite powder for moulding purposes, (P.), B., 776. Ebonite or rubber moulding powders, (P.), B., 776.
- Iliff, J. W. See Du Pont de Nemours & Co., E. I., and Marshall, John.
- Iliffe, M. See Grant, K.
- Ilinski, M., reaction between calcium oxide and sulphur dioxide, A., 312.
- Iljin, B. V., and Ivanov, V. N., measurement of absolute viscosity coefficient by the pendulum viscosimeter method, A., 925.
- Iljin, G. S., decomposition of nicotine in the tobacco plant, A., 133. Proteins of seeds of the tobacco plant. I. and II., A., 268, 1549. Effect of electrolysis on nicotine, A., 1387. Reducing nicotine content of tobacco by means of electrolysis, B., 1117.
- Iljin, N. V., Livschitz, G. L., and Tichvinskaja, E. I., determination of moisture in liquid ammonia, B., 492.
- Iljin, V. S., Jakovlev, N. N., and Vesselkina, V. M., action of hexose diphosphate and phosphates on the diabetic organism, A., 107.
- Iljinski, M. A., and Nikolaeva, A. N., preparation of 2-aminoanthraquinone from anthraquinone-2-sulphonic acid by the arsenic method, B., 138.
- and Zajkin, A. A., dynamics of acid hydrolysis of benzoyl derivatives of aminoanthraquinones, A., 623.
- Iljinski, V. P., Morin, N. V., Ostrovski, I. N., Kruglikov, A. E., and Porel, A. A., preparation of soda and sulphur from sodium sulphate, B., 99.
- Sagaidatschni, A. F., and Heligren, E. K., physicochemical conditions of production of potassium persulphate, A., 1086.
- Sagaidatschni, A. F., and Matveev, G. P., production of aluminium oxide from Tikhvinsk bauxite by the combined Penjakov methods, B., 354.
- Tarasov, G. J., and Ginzburg, A. A., reduction of sodium sulphate with hydrogen, methane, and water-gas, B., 354.
- Tarasov, G. J., and Kalani, O. Y., production of sodium sulphide by the thermoelectric method, B., 402.

- Ilkovič, *D.*, polarographic studies with the dropping mercury cathode. XLIV. Dependence of limiting currents on diffusion constant, rate of dropping, and size of drops, A., 305.
See also Heyrovsky, *J.*
- Illari, *G.*, compounds with condensed pyrrole nuclei, having behaviour analogous to urobilin. I. and II., A., 364, 1381.
- Illarionov, *V. V.*, and Solovieva, *N. A.*, mechanism of catalysis by sulphur analogues (Se and Te) in determination of nitrogen by oxidation with sulphuric acid, A., 596. Rational procedure for use of selenium in the Kjeldahl method, A., 836.
See also Kovalev, *T. O.*
- Ilgen, *R.* See Müller, *Eugen.*
- Illingworth, *J. W.*, and Keggins, *J. F.*, identification of the 12-heteropolyacids and their salts by means of X-ray powder photographs, A., 834.
and Santos, *J. A.*, use of phosphomolybdic acid in chemical analysis, A., 185.
- Illingworth, *S. R.* See Illingworth Carbonization Co.
- Illingworth Carbonization Co., Ltd., and Illingworth, *S. R.*, carbonisation or heat treatment of solid materials, (P.), B., 757.
- Illinois Steel Co., heat treatment of steel rails, (P.), B., 503.
- Illinois University. See Babbitt, *H. E.*, and Heubaum, *U.*
- Imai, *H.*, and Hagiya, *M.*, eutectoid transformation of the aluminium-zinc system, A., 693.
- Imai, *S.*, electro-osmosis. V., A., 30.
- Imai, *Y.*, active charcoal. XII. Preparation of active charcoal by the zinc chloride process, A., 1457.
See also Tamaru, *S.*
- Imaki, *T.* See Takei, *S.*
- Imanishi, *S.*, Raman spectrum of gaseous carbon disulphide, A., 564. Isotopic constitution of gold from band-spectroscopic examination, A., 1295.
- Imbesi, *A.*, and De Angelis, *V.*, influence of temperature on electrical conductivity of saccharin solutions, A., 1078.
- Imboden, *M.* See Bills, *C. E.*
- Imhoff, *W. G.*, aluminium improves finish in galvanising, B., 551.
- Imperial Bureau of Soil Science, soil deficiencies and plant diseases, B., 167.
- Imperial Chemical Industries, Ltd., distillation of polymerised drying oils, (P.), B., 238. Ammonium nitrate explosives, (P.), B., 1167.
- and Baird, *W.*, vulcanisation of rubber, (P.), B., 241. Preservation of rubber, (P.), B., 1058.
- Baird, *W.*, and Birchall, *T.*, preservation of rubber, (P.), B., 817.
- Baird, *W.*, and Davies, *J. S. H.*, vulcanisation of rubber and rubber-like substances, (P.), B., 280.
- Baldwin, *A. W.*, Everatt, *R. W.*, and Knight, *A. H.*, dye intermediates, (P.), B., 93.
- Baldwin, *A. W.*, Heilbron, *I. M.*, and Jones, *W. E.*, glyceryl ethers, (P.), B., 1130.
- Baldwin, *A. W.*, and Piggott, *H. A.*, wetting, cleansing, and emulsifying agents, (P.), B., 1131.
- and Baxter, *J. P.*, solid chlorinated rubber products, (P.), B., 70.
- and Beckett, *E. G.*, intermediates for dyes, (P.), B., 585.
- Imperial Chemical Industries, Ltd., Brown, *H. P.*, Goldstein, *R. F.*, and Stewart, *A.*, vat dye pastes, (P.), B., 397.
and Brownson, *H. W.*, refining of copper, (P.), B., 235. Heat-resisting [aluminium-nickel] alloys, (P.), B., 638. Protective coatings for preventing oxidation of heated metal [steel], (P.), B., 907.
- and Burgoine, *E.*, a vat dye [of the flavanthrone series], (P.), B., 797.
- Callan, *T.*, and Oakeshott, *S. H.*, protection of wood against attack by fungus, (P.), B., 806.
- Callan, *T.*, and Sharp, *F. L.*, manufacture and application of fungicidal bodies, (P.), B., 743.
- Carey, *W. F.*, and Slade, *R. E.*, drying of grass and other crops, (P.), B., 692.
- and Chapman, *E.*, sulphur dyes, (P.), B., 15.
- Chapman, *E.*, and Littlewood, *E. A.*, manufacture of sulphur dyes [to improve their physical form], (P.), B., 763.
- Chappell, *N.*, Haddock, *N. H.*, and Lodge, *F.*, application of dyes of the anthraquinone series, (P.), B., 225.
- and Clark, *A. M.*, recovery of sulphur dioxide from gas mixtures, (P.), B., 148.
- Clark, *W. J.*, Bosanquet, *C. H.*, and Gregory, *C. H.*, [electrical] indicating and recording apparatus, (P.), B., 462.
- Clarke, *R. B. F.*, and Fullerton, *R. G.*, rubber manufacture [from latex], (P.), B., 1104.
- and Cocksedge, *H. E.*, sodium carbonate decahydrate, (P.), B., 355.
- Crawford, *F. A. F.*, and Challenor, *W. A. P.*, liquid nitric esters [of polyhydric alcohols], (P.), B., 893.
- and Crawford, *J. W. C.*, esters [of aliphatic α -hydroxy-acids], (P.), B., 92. Plastic and coating compositions, etc., (P.), B., 599. Esters of methacrylic [α -methylacrylic] acid, (P.), B., 620.
- Crawford, *J. W. C.*, and McGrath, *J.*, [vinyl] plastic materials, (P.), B., 599.
- and Davidson, *A.*, alkylsulphonic acids, (P.), B., 938.
- and Davies, *I. A.*, ketols, (P.), B., 1085.
- Drummond, *A. A.*, and Morgan, *H. H.*, condensation products of phenols and formaldehyde, (P.), B., 1005.
- Dunbar, *C.*, and Oakeshott, *S. H.*, manufacture and use [in mercerising lye] of wetting preparations, (P.), B., 59.
- and Eastwood, *R. A.*, degreasing apparatus, (P.), B., 958.
- Evans, *J. G.*, and Lawrie, *L. G.*, stripping of [vat and basic and alizarin dyes from] dyed textiles, (P.), B., 224.
- Ewan, *T.*, and Lemmon, *R. J.*, treatment of cyanide solutions [containing gold, etc.], (P.), B., 148.
- Fawcett, *E. W.*, and McCowen, *J. L.*, vacuum distillation, (P.), B., 1026. [Short-path] vacuum distillation of materials yielding a solid distillate or residue, (P.), B., 1076.
- Fleming, *J. S. B.*, and Freer, *R. M.*, waterproof safety fuse for blasting, military demolitions, etc., (P.), B., 976.
- and Gordon, *K.*, carrying out chemical reactions with circulating gases, (P.), B., 931.
- Imperial Chemical Industries, Ltd., and Green, *S. J.*, reduction of fatty acids and esters thereof [to alcohols], (P.), B., 1003.
- Greenhalgh, *R.*, and White, *G. S. J.*, manufacture and application of preparations suitable for use in fatliquoring and oiling of leather and similar processes, (P.), B., 963.
- Haddock, *N. H.*, Lodge, *F.*, and Lumsden, *C. H.*, dyeing process, (P.), B., 722.
- Hardacre, *R. W.*, and Wormald, *A.*, textile printing process, (P.), B., 626.
- and Harrison, *A. A.*, coloured moulding compositions, (P.), B., 1152. Nitrocellulose coating compositions, (P.), B., 1152.
- Harrison, *A. A.*, and Oakeshott, *S. H.*, manufacture and application of printing inks, (P.), B., 466.
- Harrison, *A. A.*, and White, *G. S. J.*, application of cellulose ether finishes to leather, (P.), B., 1058.
- Hill, *Arthur*, and Walker, *E. E.*, improved drying oils and their application, (P.), B., 683.
- and Hill, *R.*, manufacture and application of polymerisable products, (P.), B., 368.
- Holroyd, *R.*, and Cockram, *C.*, destructive hydrogenation of carbonaceous materials, (P.), B., 583, 661. Thermal treatment with hydrogenating gases of distillable carbonaceous materials to obtain hydrocarbons, and apparatus therefor, (P.), B., 1033. Treatment with hydrogenating gases of distillable carbonaceous material, (P.), B., 1033.
- and Horsley, *G. F.*, ethyl alcohol from ethylene, (P.), B., 347. Recovery of ethylene and its homologues from gases, (P.), B., 537. Hydration of olefines, (P.), B., 1084.
- Howard, *S.*, and Wormald, *A.*, textile [resist] printing, (P.), B., 946.
- and Jackson, *K. S.*, chlorinated rubber products, (P.), B., 963.
- Jones, *M.*, and Smith, *W. F.*, flexible oil-resistant rubber composition, (P.), B., 644.
- and Knight, *A. H.*, azo-dyes [for acetate silk, etc.], (P.), B., 220. Manufacture and application of secondary diazo-dyes [for acetate silk, etc.], (P.), B., 220. Manufacture and application of azo-dyes, (P.), B., 797.
- Knight, *A. H.*, and Piggott, *H. A.*, azo-dyes [for acetate silk], (P.), B., 1086.
- Knight, *A. H.*, and Sexton, *W. A.*, dye intermediates [aminoquinol-bis- β -hydroxyethyl ether], (P.), B., 263.
- Leach, *F. P.*, and Spencer, *W. D.*, chlorinated rubber, (P.), B., 776.
- and Learmonth, *W.*, apparatus for treating gases with liquids, (P.), B., 388.
- Learmonth, *W.*, Nonhebel, *G.*, and Pearson, *J. L.*, wet purification of gases, (P.), B., 1027.
- Linstead, *R. P.*, Lowe, *A. R.*, Heilbron, *I. M.*, and Irving, *F.*, colouring matters of the phthalocyanine series, (P.), B., 15.
- Lodge, *F.*, and Lumsden, *C. H.*, anthraquinone derivatives, (P.), B., 763.
- Lodge, *F.*, and Piggott, *H. A.*, manufacture and application of anthraquinone dyes, (P.), B., 763.

- Imperial Chemical Industries, Ltd., McHaffie, I. R., and Tyrer, D., treatment of metallic sulphides to recover sulphur therefrom, (P.), B., 495.
- and Mendoza, M., azo-dyes [for leather], (P.), B., 14. Leather dyes [containing metal], (P.), B., 349. Manufacture and application of a copper-containing azo-dye, (P.), B., 1134.
- Mendoza, M., and Rose, F. L., dye intermediates [azoanthranilic acid], (P.), B., 140. [Tris- and tetrakis-] azo-dyes [containing copper], (P.), B., 397.
- Mitchell, J. A. M. W., and Spencer, W. D., chlorinated rubber, (P.), B., 370.
- and Mitchell, W., condensation products of acetylene, (P.), B., 618.
- and Montgomery, T. N., chlorinated rubber, (P.), B., 1007.
- Montgomery, T. N., and Mitchell, J. A. M. W., [cellular] constructional material [from chlorinated rubber], (P.), B., 770.
- and Moore, J. G., chlorinated [rubber] product, (P.), B., 963. Chlorinated rubber in the form of films, (P.), B., 963.
- and Mudford, H. D., delustered artificial silks, (P.), B., 801.
- and Parker, H. E., organo-mercury compounds, (P.), B., 655.
- Payn, R. C., and White, A. G., blasting cartridges, (P.), B., 479.
- and Peacock, R. B., electrical condensers, (P.), B., 1100.
- and Pearson, J. L., [bright-]annealing processes and furnaces, (P.), B., 955.
- and Piggott, H. A., textile assistants, (P.), B., 92, 139. Manufacture and application of textile assistants, (P.), B., 894.
- Piggott, H. A., and White, G. S. J., waterproofing of leather, B., 470. Treatment of leather, (P.), B., 115. Dispersing agents, etc., for use in the textile and leather industries, (P.), B., 985.
- and Pryde, D. R., operation of coke ovens, (P.), B., 9.
- Raistrick, H., Robinson, R., and Charles, W. L., colouring matters of anthraquinone series, (P.), B., 95.
- Richards, C. W., and Dodd, H., plastic composition or putty, (P.), B., 162.
- Ritchie, P. D., Jones, D. T., and Burns, R., unsaturated acid derivatives, (P.), B., 715.
- Roberts, H. M., and Harris, C. G., [vaporisation of liquid] disinfecting or fumigating [agents], (P.), B., 176.
- and Robinson, E. B., linoleum cement, (P.), B., 1104.
- and Rubenstein, L., cellulose esters [sulphates], (P.), B., 144.
- and Saunders, K. H., diazoimino-compounds and their application in dyeing and printing, (P.), B., 349.
- and Sayles, H. S., apparatus [packing] for treatment of gases or vapours with liquids, (P.), B., 533.
- and Sexton, W. A., intermediates and azo-dyes therefrom [ice colours], (P.), B., 985.
- and Sharp, F. L., insecticides, (P.), B., 327.
- and Sossion, C. E., flash compositions for use in electric igniters for blasting fuses, etc., (P.), B., 704.
- Imperial Chemical Industries, Ltd., and Speakman, J. B., crabbing of materials manufactured from animal fibres such as wool, (P.), B., 766. Treatment of animal fibres such as wool, and production of [shrinkage] effects on materials containing wool and related animal fibres, (P.), B., 766.
- and Spencer, W. D., chlorinated rubber products and apparatus therefor, (P.), B., 280.
- and Tattersall, H. J., material comprising [an acrylic ester] polymoride in sheet form, (P.), B., 1005. Nitrocellulose plastics, (P.), B., 1154.
- and Taylor, J., blasting charge, (P.), B., 879, 1167. Blasting cartridges, (P.), B., 926.
- Taylor, J., and Young, W., blasting cartridge, (P.), B., 784.
- and Thomson, M. G., coated fabrics, (P.), B., 1042.
- and Traill, D., purification of cellulose aralkyl ethers, (P.), B., 987.
- and Tyrer, D., treatment of pyrites and similar sulphur ores, to recover sulphur therefrom, (P.), B., 495.
- Tyrer, D., and Clark, A. M., sulphuric acid, (P.), B., 947.
- Walker, F. T., and Hetherington, A. C., floor coverings and similar materials [containing chlorinated rubber], (P.), B., 368.
- and White, A. G., blasting cartridges, borehole charges, and cooling plugs, (P.), B., 207. Blasting explosive charges and borehole charges, (P.), B., 207, 479.
- and Wormald, A., textile dyeing and printing [with leuco-esters of vat dyes], (P.), B., 224. Textile printing, (P.), B., 1042.
- and Wyler, M., rhodamine dyes and their application, (P.), B., 219.
- Wyler, M., and Kershaw, A., acenaphthene derivatives, (P.), B., 940.
- Imperial Institute, gums from Nigeria, B., 40. Papermaking trials with coniferous woods from Southern Rhodesia, B., 57. Essential oils from Seychelles, B., 523. New gutta from South Africa, B., 1154.
- Imperial Japanese Government, Minister of Communications, purification of electric insulating liquids, (P.), B., 67.
- Imperial Paper & Color Corporation, and Wirt, A. E. V., applying and printing a water-repellent coating on paper or similar material, (P.), B., 799.
- See also Wirt, A. E. V.
- Imperial Type Metal Co. See Yerger, W. S.
- Impermeable Products, Ltd. See Campbell, E. R.
- Improved Devices, Inc. See Sage, E. R.
- Imre, L., interface equilibria and inner equilibria in heterogeneous systems. III. Significance of molecular structure of salt-like compounds for charging adsorption on their surfaces, A., 161.
- Imschenetzki, A., micro-organisms causing spoilage of viscose material, B., 844.
- Inaba, Takuya, and Kitagawa, K., Manchurian oilseeds. I.—III., B., 559.
- Kitagawa, K., and Sato, Masanori, soya lecithin. IV. Emulsifying action for oil-water mixtures. V. Properties of lecithin soap solutions, A., 31.
- See also Sato, Masanori.
- Inaba, Tsutomu, influence of gonads on metabolism. I. Change in metabolism due to castration, A., 128.
- Inagaki, S., constituents of the Japanese domestic mushroom. II. Organic bases of *Hydnum aspratium*, Berk., A., 673.
- Inamura, Y. See Uemura, T.
- India Rubber, Gutta Percha, & Telegraph Works Co., Ltd., and Stern, H. J., gas-producing materials for inflating hollow articles of rubber, (P.), B., 163.
- Indian Refining Co. See Bryant, G. R., and Govers, F. X.
- Indiana Steel & Wire Co. See Grapo, F. M.
- Indovina, R., determination of bromine in blood, A., 375.
- Industrial Chemical Sales Co., Inc. See Statham, N.
- Industrial Development Corporation. See Wilkins, R. A.
- Industrial Dryer Corporation. See Harris, G. D.
- Industrial Patents Corporation. See Canter, O. R., and Christopher, E. F.
- Industrial Patents, Ltd. See Herbsman, A. M.
- Industrial Sugar Products Corporation. See Ford, A. S.
- Industries of America, Inc. See Dechant, F. H.
- Infeld, L. See Born, M.
- Ing, H. R., alkaloids of *Anagyris foetida*. II., A., 1257, 1433.
- See also Cowan, S. L.
- Ingberg, S. H., computing volumetric components of fluid mixtures, B., 753.
- Inge, J., and Valter, A., ageing of insulation on high-tension cables, B., 363.
- Ingenieurbüro für Hüttenbau W. Schwier. See under Schwier, W.
- Ingersoll, S. L., and Ingersoll Steel & Disc Co., composite metal [steel] articles, (P.), B., 595.
- Ingersoll Steel & Disc Co. See Ingersoll, S. L.
- Ingerson, E., layered peridotitic laccoliths in Newfoundland, A., 726.
- Ingleson, H. See Sullivan, W. H.
- Inglis, D. R., nuclear moments, A., 278. Distribution of ferromagnetism among the metals, A., 1309.
- Ingmanson, J. H., and Vacca, G. N., moisture absorption of jute; effect of bituminous treating mixtures, B., 586.
- See also Electrical Res. Products.
- Ingold, C. K., and Mohrhenh, H. G. G., electrometric titration curves of dibasic acids. V. Dissociation constants of cyclopentanedicarboxylic acids [at 25°], A., 1076. Mechanism of, and constitutional factors controlling, the hydrolysis of carboxylic esters. VII. cyclopentanedicarboxylic esters; attempted check on the calculation of molecular dimensions, A., 1465.
- Raisin, C. G., and Wilson, Christopher L., direct introduction of deuterium into benzene, A., 74. Direct introduction of deuterium into benzene without heterogeneous catalysis, A., 74.
- and Rogers, M. A. T., influence of poles and polar linkings on the course pursued by elimination reactions. XXII. Wagner rearrangement in the Hofmann degradation, A., 853. Modes of addition to conjugated unsaturated systems. VIII. Reduction of α -vinylcinnamic acid, A., 975.
- and Rydon, H. N., validity of Holden and Lapworth's theory of mechanism of abnormal Michael additions, A., 977.

- Ingold, C. K. See also Anantakrishnan, S. V., Angus, W. R., Duff, D. A., Gleave, J. L., and Hughes, E. D.
- Ingraffia, F., ketonic acids with pyrrole nucleus, A., 221. Mixed functional derivatives of 2:4-dimethylpyrrole, A., 221. Reaction between phthalic anhydride and the magnesium derivative of 2:4-dimethylpyrrole, A., 221.
- Ingraham, R. C., and Visscher, M. B., elimination of dyes in gastric and pancreatic secretions; mechanism of secretion of acid and base, A., 1006.
- Ingraham, W. T., extraction of diphenylamine [from smokeless powder], (P.), B., 751.
- Ingram, J. R., and Rubber Service Labs. Co., vulcanisation of rubber, (P.), B., 513.
- Ingram, J. W. See Koppers Co. of Delaware.
- Ingrassia, G., blood-cholesterol and resistance to saponin in animals on liver diet, A., 1000.
- Ingvarsson, G., determination of lactic acid, A., 554.
- Inhoffen, H. H., transformation products of ergosteryl acetate-maleic anhydride, A., 857.
- Inman, G. O. See Raiford, L. C.
- Inman, O. L., formation of chlorophyll and the beginning of photosynthesis, A., 1288.
- See also Rothemund, P.
- Innes, J. A. See Lyall, A.
- Innes, R. F., chemistry of the "first bath" of the two-bath chrome-tanning process, B., 419. Deterioration of vegetable-tanned leather on storage. VI. Effect of methods of finishing and tanning on absorption of sulphur dioxide from the atmosphere. VII. Protective action of salts, B., 420, 601. Changes occurring during neutralisation of chrome[tanned] leathers, B., 601. Acetone method for determination of sulphuric acid and buffer salts in vegetable-tanned leather, B., 601. Pan-European Commission on analysis of chrome[tanned] leather, B., 1106.
- Inokuty, H., Nagano, T., Nagaoka, Z., and Nomura, E., test of aluminium-foil [heat] insulation, B., 312.
- Inoshita, K. See Itoh, M.
- Inoue, Harushige, and Ishimura, K., catalytic action of Japanese acid earth. VI. Action on cyclohexylamine and its derivatives. VII. Relation between the constituents of the earth and its catalytic action, A., 44.
- Inoue, Hikoni, relation between change of temperature and viscosity of the bacterial suspension and the thermal death point of bacteria, A., 409.
- Inoue, S. See Atsuki, K.
- Inoue, Takahide. See Nishizawa, K.
- Inoue, Takeshi, non-protein-carbon and -nitrogen of muscle and post-mortem changes. II, A., 376.
- Inoue, Y., and Kato, Haruo, unsaturated fatty acids and their derivatives. X. Constitution of elupanodonic acid, A., 195.
- Inouye, K. See Seyer, W. F.
- Inouye, Toshi. See Shiba, H.
- Insley, E. G., finely-divided metals [as catalysts and adsorbents] and their preparation, A., 941.
- Insley, H., and Ewell, R. H., thermal behaviour of the kaolin minerals, B., 767.
- See also Ewell, R. H.
- Institution of Mining Engineers, Utilization of Coal Committee, electrostatic de-tarring of coke-oven gas, B., 341.
- Interessen Gemeinschaft der Farbenindustrie Akt.-Ges. See under I. G. Farbenind. A.-G.
- Intermetal Corporation, and Jenness, L. G., titanium oxide, (P.), B., 147.
- International Bitumen Emulsions Corporation, composite paper, (P.), B., 18. [Bitumen] emulsions, (P.), B., 662.
- Internat. Bitumenoil Corporation. See Vandegrift, J. N.
- Internat. Bleaching Corporation. See Hatch, R. S., and Wolf, R. B.
- Internat. Combustion, Ltd., and Farrant, J. C., wet-grinding mills, (P.), B., 882.
- Internat. Commission for Uniform Methods of Sugar Analysis, [determination of polarisation and of reducing sugars content of raw cane sugars], B., 693.
- Internat. Convention for Unification of Analytical Methods for Wines, analytical methods for wines, B., 1016.
- Internat. Furnace Equipment Co., Ltd., and Bailly, L., pottery and other kilns or ovens, (P.), B., 49.
- Internat. Holding of Distillation & Cokéfaction à Basse Temp. & Minière. See Comp. Gén. de Distillation & Cokéfaction à Basse Temp. & Min. "Intertrust" Soc. Anon.
- Internat. Hydrogenation Patents Co., Ltd., motor fuel, (P.), B., 583. Treatment of carbonaceous materials with hydrogenating gases and apparatus therefor, (P.), B., 661, 837. Stabilisation of liquid hydrocarbons, especially motor fuels, (P.), B., 662. Purification of hydrogen for destructive hydrogenation, (P.), B., 837. Destructive hydrogenation of coal dispersed in oil, (P.), B., 1082. Production of hydrocarbon products by treatment of distillable carbonaceous materials with hydrogenating gases, (P.), B., 1125.
- See also I. G. Farbenind.
- Internat. Latex Processes, Ltd., patterned sheet material from raw pasteboard, (P.), B., 18. Porous fibrous products, (P.), B., 98. Rubber films, (P.), B., 196. Articles and goods containing rubber [from latex], (P.), B., 196. Spreading of aqueous dispersions of rubber, etc., (P.), B., 279. Thickening of [rubber] latex, (P.), B., 321. Coating composition for paper, (P.), B., 466. Stabilisation of creamed [rubber] latex, (P.), B., 468. Strong and impervious rubber materials, (P.), B., 512. Coating of vulcanised rubber articles, and a coating composition particularly suitable for vulcanised rubber articles, (P.), B., 563. Leather-rubber material [from latex], (P.), B., 738. Waterproof and greaseproof papers, (P.), B., 799. Chlorinated rubber, (P.), B., 963. Soft rubber compositions and goods, (P.), B., 1006. Rubber articles, (P.), B., 1006.
- Chapman, W. H., Owen, E. W. B., and Pounder, D. W., goods containing sponge-like or cellular rubber, (P.), B., 817.
- and Faldini, M., [clarified] vulcanised aqueous dispersions of rubber, (P.), B., 1105.
- McKay, R. F., and Kaye, J., production of goods containing rubber or similar material [from aqueous dispersions], (P.), B., 512.
- Internat. Latex Processes, Ltd., and Magyar Ruggyantaárugyár Részvénytársaság, waterproof textile products, (P.), B., 303.
- and Soc. Anon. Prodote Salpa & Affini (S.A.P.S.A.), artificial or reconstructed leather, (P.), B., 242.
- and Trobridge, G. W., goods containing sponge-like or cellular rubber, etc., (P.), B., 279.
- Twiss, D. F., and McCowan, W., goods of rubber or similar material, (P.), B., 35.
- and Warren, F. W., articles of rubber, etc., (P.), B., 113.
- Internat. Nickel Co., Inc. See French, H. J., Geiger, G. F., and La Que, F. L.
- Internat. Paper Co., continuous bleaching [of pulp, etc.], (P.), B., 19. Bleaching of fibrous cellulose, (P.), B., 59.
- See also Campbell, John.
- Internat. Patents Development Co., maize starch, (P.), B., 120. [Maize] starch-making system, (P.), B., 871.
- See also Curry, H. W., Giesecke, F. O., and Newkirk, W. B.
- Internat. Precipitation Co. See Anderson, Ewald, Buff, C. T., Deutsch, Walther, Gies, J. R., Hahn, C., Heinrich, R., Horne, G. H., Knight, A. W., Lissman, M. A., and Marshall, K. I.
- Internat. Pulverizing Corporation, pulverising of minerals and similar materials, (P.), B., 882.
- Internat. Society of Leather Trades Chemists, Committee of Australian Section, curing of [raw] hides and skins in Australia, B., 1007.
- Internat. Vitacrine Laboratory Corporation. See McGrabbe, H. W. M.
- Internationale Vereniging voor de Rubberen andere Cultures in Nederl.-Indie, asphalt or bituminous compositions containing rubber, (P.), B., 1083.
- Intravenous Products Co. of America, Inc. See Christina, V.
- Inukai, F., and Nakahara, W., isolation of phosphocholine from ox liver, A., 1265.
- See also Suzuki, I.
- Invox Corporation. See Craig, P. H.
- Ioanid, G. See Mironesco, A.
- Iob, L. F. See Swanson, W. W.
- Iodine Educational Bureau, Inc. See Karns, G. M.
- Ioffe. See under Joffe.
- Ionesco. See under Jonesco.
- Ionesco-Matin, A., and Herscovici, S., mercurimetric determination of halogens, A., 183.
- and Popesco, C., mercurimetric method for determination of hydrastinine, hyoscyamine, scopolamine, eserine, and apiol; reaction for identifying apiol, A., 999.
- and Sandovici, (Mlle.) M., alteration in medicaments indicated by determination of p_{H_2} , B., 478.
- Ionescu, C. N. See Nenitzescu, C. D., and Vintilescu, I.
- Ionescu, M. V., new type of manometer, A., 467.
- Ionescu, T. D., and Soare, A. G., preparation of sulphur chlorides and metal chlorides by chlorination of sulphide ores, B., 21.
- Ionescu, T. F., ionised gases, A., 139.
- and Mihul, C., structure of ionised layer of the atmosphere, A., 143. Dielectric constant and conductivity of ionised gases, A., 430.

- Ionescu, V. See Balanescu, G.
- Ionizing Corporation of America. See Henry, I. W.
- Iowa State College of Agricultural & Mechanical Arts. See Goss, E. F., and Hixon, R. M.
- Ipatiev, V. N., [preparation of ethylene], A., 191. Catalytic polymerisation of gaseous olefines by liquid phosphoric acid. I. Propylene, B., 1035. and Corson, B. B., catalytic polymerisation of gaseous olefines by liquid phosphoric acid. II. Butylenes, B., 1035.
- Corson, B. B., and Egloff, G., polymerisation, a new source of gasoline, B., 980.
- and Egloff, G., polymerisation gasoline from cracked gases, B., 757.
- and Freitag, C., double decomposition and oxidation of inorganic compounds under pressure; transformation of heavy spar into barium carbonate, B., 543. Double decomposition and oxidation of inorganic compounds under pressure; conversion of heavy spar into barium carbonate, B., 1141.
- and Grosse, A. von, reaction of paraffins with olefines, A., 1348.
- Komarevsky, V. I., and Grosse, A. von, reaction of naphthenic hydrocarbons with olefines, A., 1357.
- and Nemtsov, M. S., polymerisation of olefines from cracked gases, B., 7.
- Pines, H., and Schaad, R. E., isomerisation of *n*-butenes, A., 192.
- Pines, H., and Wackher, R. C., catalysis in hydrogen bromide-olefine additions, A., 62.
- and Usachev, P. V., oxidation of phosphorus with water at high temperature and pressure in presence of alkali; production of phosphorous acid, A., 460.
- See also Universal Oil Products Co.
- Ipatiev, V. V., and Tronev, V. G., mechanism of displacement of noble metals from solutions of their salts by hydrogen under pressure. I. Displacement of palladium from solutions of palladium chloride. II. Displacement of noble metals from solutions of H_2PtCl_6 , H_2IrCl_6 , Na_2IrCl_6 , and Na_2RhCl_6 , A., 824. Separation of metals of the platinum group by hydrogen under pressure, A., 951.
- Ipatov, I. V., viscosity of molten salts, A., 1313.
- Ippen, F. See Demole, V.
- Ipsen, C. L. See Gen. Electric Co.
- Iredell, C. V. See Westinghouse Lamp Co.
- Irie, T. See Kataoka, K.
- Irie, Tatsuo, artificial preparation of cryolite. III. Preparation from fluorspar, B., 451.
- Irie, Toshi. See Murakami, M.
- Irion, C. E. See Craig, G. L.
- Irmann, R. See Zeerleder, A. von.
- Iron and Steel Institute, corrosion of steel sleepers in mines, B., 635. Marine corrosion [of steel]. IV. Corrosion tests on welded ships' plates, B., 635. Waste-heat boilers in open-hearth practice, B., 977.
- Ironsides Co. See Williams, R. C.
- Irrera, L., action of diazomethane on imides. II., A., 1357.
- Irrgang, K. See Bernhauer, K.
- Irvin, R., determination of diastatic strength, B., 650. Apparatus for measuring gas production and expansion in doughs, B., 697.
- Irvine, F. A. See Lathrop, E. C.
- Irvine, (Sir) J. C., and Routledge, D., constitution of isosucrose, A., 1226.
- Irving, E., and Smith, J. A. B., fatty acids of pig liver. III. General analysis, A., 1004.
- Irving, F. See Imperial Chem. Industries.
- Irving, G. S. See Millican, T.
- Irving, G. W., jun., and Smith, N. R., salt bridge for use in electrometric measurements, A., 58.
- Irving, H. See Chattaway, F. D.
- Irving, J. T., effect of insulin and other factors on iodoacetate hyperglycemia, A., 119.
- Irving, L., acid-base equilibrium in seawater, A., 322.
- Irwin, D. A. See Robson, W. D.
- Irwin, J. T. See Ebright, H. E., and Hansen, J. E.
- Isaac, P. V., report of Imperial entomologist, B., 517.
- Isaac, W. E., chlorosis of deciduous fruit trees. II. Peach, B., 471.
- Isaacs, M. L., colorimetric determination of dissolved oxygen [in water], B., 928.
- Isaacs, R. See Sturgis, C. C.
- Isabellen-Hütte G.m.b.H., and Heusler, F., acid-resistant silicon-iron castings, (P.), B., 1147.
- Isabolinski, M., Levzov, I., and Batanov, V., preparation of diphtheria anatoxin, A., 256.
- Isaev, S. A. See Gabrieliantz, S. M.
- Isakov, E. N., relation between phosphoric acid and fluorine contents of the Chibin apatite-nepheline deposits, A., 61. Determination of fluorine in the gases and solutions obtained in the superphosphate industry, B., 60.
- Isakova, A., interrelations between higher plants and micro-organisms, A., 406. Microbiological investigation of soils, B., 323.
- Isawa, S., influence of hormones on intestinal absorption. I. Sodium chloride solution. II. Glucose solution. III. Amino acid, A., 540, 1172.
- Isawa, T., and Obinata, I., X-ray investigations on α -tin bronzes, A., 693.
- Isbell, H. S., purification of α -D-xylose and its mutarotation, A., 199. β -Glucose-heptose and its mutarotation, A., 200. Nomenclature of α - and β -sugars, A., 476. Optical rotations and other properties of lead and calcium aldonoates, A., 732. Crystalline magnesium xylonate and preparation of magnesium salts of aldonic acids, (P.), B., 403. Calcium lactobionate, (P.), B., 939. Crystalline gluconic acid, (P.), B., 1130.
- and Frush, H. L., electrolytic oxidation of xylose in presence of alkaline-earth bromides and carbonates, A., 732.
- Isbell, W. T., Weaton, G. F., and St. Joseph Lead Co., [roasting] treatment of [zinc sulphide] ores, (P.), B., 66.
- Isbell Porter Co. See Warner, A. W.
- Iselin, E. See Viollier, R.
- Isemann, W. See Wessely, F.
- Isemura, T., rhythmic precipitates. IV. Distances between rhythmic layers, A., 293.
- Isenhour, L. L., and Horsfall, J. G., copper analysis of foliage sprayed with cuprous oxide, B., 327.
- Iserga, M. See Podolskaja, M.
- Isgarischev, N. A., and Kaplan, G. E., electrodeposition of niobium, A., 711.
- Isgarischev, N. A., and Mirkin, I. A., mutual displacement of metals, A., 171, 449.
- and Prede, A. F., electrodeposition of tantalum, A., 711.
- and Smirnov, A. S., effect of colloidal graphite on corrosion of boiler plate, B., 104.
- Isherwoods, Ltd., pulverising mills for reduction of mineral ores, etc., (P.), B., 657.
- Ishibashi, K., Fushun green shale. I. and II., B., 1124.
- Ishibashi, M., and Kishi, H., radioactive indicators. I. Determination of solubility of lead salicylaldoxime with thorium-B as radioactive indicator, A., 577. Analysis by means of organic compounds. I. Separation and determination of copper and cadmium by salicylaldoxime and electrolysis. II. Separation and determination of copper and cadmium by salicylaldoxime and hydroxyquinoline. III. Separation and determination of copper and lead by salicylaldoxime, A., 720. Gravimetric determination of lead as lead salicylaldoxime and its solubility measurement by using Th-B as radioactive indicator, A., 1338.
- and Mori, S., detection of tellurium, A., 718.
- Ishida, K., function of nephrohormone in regulating blood- and urinary chloride, A., 538.
- Ishidate, M. See Asahina, Y., and Tamura, K.
- Ishihara, (Miss) Kimi. See Tonomura, T.
- Ishihara, Kiyoyuki, 3:6-dialkoxy-10-alkyl-acridinium derivatives with various types of amino-group in the 9 position. III. Mechanism of reaction of 9-chloro-3:6-dialkoxy-10-alkylacridinium chloride. IV. Synthesis of 3:6-dialkoxy-9-aryl-amino-10-alkylacridinium chlorides, A., 93, 1132.
- Ishihara, M., X-ray rotation crystal and fibrous structure diagrams. I.—III. IV. White and monochromatic X-rays. V. X-Ray diagrams of the cellulose micelle, A., 151, 687.
- Ishihara, T., Onoda, T., and Umetu, K., effect of addition of colloidal substances on polarisation potential in electrodeposition of zinc from aqueous solutions of zinc sulphate, A., 305.
- Ishii, C., supersonic velocity in gases, A., 572.
- Ishii, M., effect of administration to children of extra vitamin-B₂, A., 1175.
- Ishikawa, F., Masuda, K., and Takai, T., equilibrium: $NaCl(s) + NaHSO_4(s) \rightleftharpoons Na_2SO_4(s) + HCl(g)$, A., 1323.
- Murooka, T., and Hagiwara, H., fluorine. II. Reactions of oxygen fluoride with water and solutions of sodium hydroxide, A., 51.
- and Satō, Yoshio, transition of thallous iodide, A., 437.
- Ishikawa, H. See Kobayashi, K.
- Ishikawa, T., viscosity formula for binary mixtures, the association degrees of constituents being taken into consideration, A., 1066.
- and Baba, Toshitomo, viscosity formula for binary mixtures, the association degrees of constituents being taken into consideration. X. Viscosity of aqueous solutions of electrolytes, A., 817.

- Ishimaru, S., separation and determination of metallic and phosphate ions in presence of one another. I. and II., A., 56, 1937. Potentiometric titration of organic precipitates. II. Indirect volumetric determination of nickel, A., 1339.
- Ishimura, K., catalytic action of Japanese acid earth. VIII. Relation between catalytic activity and adsorption. IX. and X. Promotion and poisoning of catalytic action, A., 175, 309, 455.
See also Inoue, *Harnushige*.
- Ishimura, L. S., lead [suboxide] powder, (P.), B., 900.
- Ishizuka, Y., calcium-potassium law of Ehlenberg. I., A., 1109. Absorption of nitrogen, phosphoric acid, and potassium by paddy rice at various stages of growth in sand culture, B., 117.
- Isii, N. See Nagai, *Yuzaburo*.
- Iskoldski, I. I., and Drushinina, O. S. desilication of aluminates, B., 146.
and Gromov, B. V., adsorption of sodium hydroxide and sodium carbonate by aluminium hydroxide, A., 1315.
- Ismailov, S. See Frenkel, J.
- Ismailski, V. A., and Kaganova, S. S. [with Gorodnev, S.], compounds of bismuth and tartaric acid. VII. Action of ammonia on monobismuthyl-tartaric acid, A., 608.
and Simonov, A. M., preparation of 3-nitro-4-hydroxyphenylarsinic acid from *p*-chloroaniline, A., 1514.
- Isom, E. W., Herthel, E., and Sinclair Refining Co., cracking of hydrocarbons, (P.), B., 56.
and Sinclair Refining Co., cracking of hydrocarbons, (P.), B., 56, 1035. Apparatus for cracking heavy hydrocarbons to produce lighter hydrocarbons, (P.), B., 217.
- Taber, G. H., jun., and Sinclair Refining Co., cracking of hydrocarbons, (P.), B., 217.
- Isomatsu, R., relations between fineness of particles and plasticity of ceramic bodies, B., 850.
- Israel, L. See Schwartz, A.
- Issekutz, B. von, action of cardiac stimulants on chloroform-impaired circulation, A., 526.
and Issekutz, B. von, jun., site of thyroxine action, A., 540.
Leinzinger, M., and Novák, E., [pharmacological] action of tetrazoles, A., 525.
- Issekutz, B. von, jun. See Drexler, E., and Issekutz, B. von.
- Isser, G., and Lustig, A., electrophoresis of antimony, A., 823.
- Issinskii, P. A. See Iv, B. T.
- Issoglio, G., physico-mechanical properties of dough, B., 1115.
- Itallie, T. B. van, phosphoric acid and potash contents of grass as an indication of their content in the soil, B., 1011.
See also Katz, J. R.
- Itano, A., and Matsuura, A., nodule bacteria of *Astragalus sinicus*, Genge. III. Fermentation of carbohydrates with special reference to the carbon and nitrogen source, A., 536. Influence of ultra-violet rays on physiological activities of *Azotobacter*. I. Lethal action on *A. chroococcum*. II. Stimulation of *A. chroococcum* by ultra-violet rays. III. Effect of ultra-violet and monochromatic rays on pigment production, A., 537, 1167, 1420.
- Itano, A., and Tsuji, Y., iodine contents of soils in Japan. I. and II., A., 191; B., 1060. Agar-agar; physico-chemical properties and influence on growth of micro-organisms, A., 409. Iodine content of tea, A., 1042, 1436. Agar. II. Physico-chemical properties of agar and their influence on growth of micro-organisms, A., 1170. Direct determination of p_{H} of soil in its natural state by the quinhydrone method. I. Determination of p_{H} in paddy-field soil, B., 865.
- Itersen, G. van, jun., and Coumou, J., iodine-amylum reaction, A., 1320.
- Ithara, M., impact torsion tests. II.—IV., B., 856.
- Itizyo, M., biochemistry of copper. IX. Effect of rapid loss of blood followed by injection of salt solution on blood-copper, A., 643.
- Ito, H., constitution of miliacin, A., 753. Chemical investigation of *Gramineae* oils, B., 463.
- Ito, K. See Suzuki, H.
- Ito, S. See Yoshimura, R.
- Ito, T., symmetry of the rhombic pyroxenes, A., 813.
- Itoh, M., Inoshita, K., and Titani, T., action of dilute heavy water on tubercle bacilli, A., 1170.
- Itoh, R., potentiometric study of catalase action, A., 1161. Spectroscopy of purified enzymes. I. Xanthine oxidase and catalase, A., 1535.
- Itchner, V. See Karrer, P.
- Itter, S., Orent, E. R., and McCollum, E. V., extraction of vitamin-B, A., 544. Simplified method for preparing lactoflavin and its growth effect, A., 544. Possible rôle of thiol group in vitamin-B₂ deficiency, A., 544.
- Itterbeek, A. von, and Keesom, W. H., measurements on viscosity of oxygen gas at liquid oxygen temperatures, A., 438.
- Ittner, M. H., soap, (P.), B., 109.
- Itzkovitsch, A. V. See Resh, M. P.
- Itzkovitsch, I., tanning with chromal, B., 817.
- Juracec. See under Juracec.
- Iv, B. T., and Issinskii, P. A., thermal treatment in preparation of pressed wood pulp, B., 798.
- Ivanenko, D. See Gapon, E.
- Ivanenko, E. F. See London, E. S.
- Ivankin, V. K. See Diakov, M. J.
- Ivannikov, P. J., apparatus for volumetric determination of aluminium, A., 55.
See also Frost, A. V., and Vedenski, A. A.
- Ivanov, A. See Teterin, V.
- Ivanov, A. E. See Tzilidas, I. E.
- Ivanov, A. G. See Logvinova, Z. V.
- Ivanov, B. I. [with Nekrassova, O. V., and Klotz, V. J.], thermal decomposition of peat and its constituents, B., 436.
- Ivanov, D., constitution of dynopinacene, A., 86.
and Spassov, A., reaction between esters of organic acids and magnesium isopropyl chloride. I. and II. Ethyl acetate and propionate, A., 64, 845. Aldolising action of mixed secondary and tertiary organomagnesium compounds on certain ketones, A., 1112.
- Ivanov, E. E., action of monohalogeno-acetic acids on glycolysis and mobility of sperms, A., 1006.
- Ivanov, G. G. See Krotov, I. V.
- Ivanov, I. See Favorski, M.
- Ivanov, I. A. See Ivanov, V. T.
- Ivanov, I. I. See Kuruindin, K. S.
- Ivanov, I. Z. See Orlov, N. A.
- Ivanov, K. See Kudra, O. K.
- Ivanov, K. I., Falin, V. F., and Morozova, N. V., experimental hydrogenation of the residue from primary tar from Barzass coals for obtaining lubricating oils, B., 790.
- Gutzait, A. M., and Lushetski, A. A., compressor oil as a possible cause of explosions in oxygen columns, B., 269.
and Savinova, V. K., initial stages of combustion of hydrocarbon fuels, A., 937.
- Ivanov, K. N. See Gratzianski, N. N., and Plotnikov, V. A.
- Ivanov, N. N., and Lavrova, M., variations in the alkaloid content of lupins, A., 133.
- Marga, V. I., and Onokhova, N. P., vitamin-C preparation from fruits of the dog-rose, A., 546.
and Smirnova, M. A., vitamin-A content of carrot varieties, A., 543.
- Ivanov, P. M., improvement of Ban's method of extraction of crude fat, B., 415.
- Ivanov, S. See Lutenberg, C.
- Ivanov, V. I., application of pulp in the mass and with a high moisture content in production of viscose rayon, B., 350. Use of pulp with increased moisture content for production of viscose silk, B., 445.
- Ivanov, V. N. See Iljin, B. V.
- Ivanov, V. T., and Ivanov, I. A., sintered glass plates, A., 467.
- Ivanova, A. N. See Pletenev, S. A.
- Ivanova, E. N. See Gerasimov, I. P.
- Ivanova, M. A. See Pigulevski, G. V.
- Ivanova, V. See Rogovin, S.
- Ivanova, V. S., utilisation of ammonia-nitrogen by cotton, B., 918.
- Ivanova, V. T. See Sakostschikov, A. P.
- Ivanovszky, L., viscosity, its determination and significance, with particular reference to solid hydrocarbons and waxes, B., 289. Refraction and dispersion; their determination and significance, with particular reference to solid hydrocarbons and waxes, B., 1125.
- Ivantischin, M. N., geochemical zone-like character of the distribution of metals in the Far East, A., 1343.
- Iveković, H., determination of chlorine value of water, B., 256.
- Iveronova, V., precision methods for measurement of parameters of crystal lattices, A., 284.
and Shdanov, G., rolling texture of brass, A., 693; B., 361.
- Iversen, P., and Jacobsen, E., excretion of phosphates by the kidney, A., 1267.
See also Bjerring, T.
- Ives, D. J. G., and Rydon, H. N., mechanism of three-carbon tautomerism, A., 1350.
- Ivey, K. M., and Resinox Corp., oil-soluble resins, (P.), B., 737.
- Ivlev, V. S., micro-determination of calorific value of foods, A., 238.
- Ivo, U., and Guiseppeina, M., analysis of elektron [metal], B., 153.
- Ivy, A. C. See Cuthbert, F. S., Reid, P. E., Schnedorf, J. G., and Voegtlin, W. L.
- Iwabuchi, K., influence of the spleen on sulphur metabolism, A., 1154.

- Iwai, M. See Ueno, Sei-ichi.
- Iwamoto, K., fading of dyes. I. Photochemical decomposition of malachite green and crystal violet, B., 1090.
- Iwamura, A., quantitative emission-spectrum analysis of lead and cadmium contained in zinc oxide, B., 1043.
- Iwamura, I., "miso," a fermented soyabean paste. II. Influence of temperature on ripening of "miso," B., 1160.
- Iwase, E., fluorescence of Japanese hyalite in ultra-violet light, A., 468. Luminescence excited in minerals by X-rays, A., 565. Fluorescence spectrum of apatite in ultra-violet light, A., 681.
- Iwata, T., oxygen capacity of haemoglobin. I. Influence of p_n on oxygen-combining ability of red blood-corpuscles. II. Critical temperature causing heat-injury to gas-carrying ability of haemoglobin. III. Velocity of heat-injury sustained by haemoglobin on its oxygen capacity, A., 371. Exchange of hydrogen carbonate and chloride ions between blood-serum and red corpuscles at different carbon dioxide tensions, A., 372.
- Iwatake, D. See Fujita, A.
- Iwato, M., and Watanabe, Kaichiro, presence of taurocholate in the bile of cats and snakes, A., 1147.
- Iyengar, A. V. V., decamination in virus-infected plants, A., 554. Biochemistry of the spike disease of *Vinca rosea*, A., 1181. Biochemical factors of disease-resistance in plants, A., 1181. Spike disease of sandal (*Santalum album*, Linn.). XVI. Distribution of arsenic in sandal wood treated with sodium arsenite, B., 472. See also Rajagopal, S.
- Iyengar, B. A. S. See Bhaskaran, T. R.
- Iyengar, B. N., open-pan system of white sugar manufacture, B., 39. Report of agricultural chemist, 1932-1933, B., 471.
- Iyengar, M. A. S. See De Sigmund, A. A. J.
- Iyengar, N. K. See Sreenivasaya, M.
- Iyer, A. V., and Ayyar, N. K., mineral assimilation from two typical fodders, B., 251.
- Iyer, C. R. H., and Rajagopalan, R., determination of nitrogen in soils by oxidative digestion, B., 1108.
- Rajagopalan, R., and Subrahmanian, V., rôle of organic matter in plant nutrition. II. Oxidising agents as fertilisers. X. Influence of different forms of manganese on oxidation of organic matter and release of plant nutrients, B., 37, 967. Oxidative digestion of organic nitrogen [in soils], B., 1009.
- Siddappa, G. S., and Subrahmanian, V., rôle of organic matter in plant nutrition. VI. Effect of injecting minute amounts of organic matter on plant growth and reproduction, B., 471.
- Iyer, M. P. V., potentiometric studies in formation and stability of colloidal solutions. I. Ferric oxide sols, A., 296. Adsorption indicator in volumetric determination of sulphates, A., 836. See also Doss, K. S. G.
- Iyer, P. V. S. See Raghavachari, T. N. S.
- Iyer, Y. V. S., characteristics of sandalwood seeds and seed oil (Mysore), B., 640.
- Izikowitz, S., behaviour of blood-sugar during sulphur (sulfosin) treatment of dementia praecox, A., 108.
- Izmailova, N. A. See Bukin, V. N.
- Izrailson, Z. I., Shmerling, A. A., Ablin, I. N., and Baidan, G. K., formation of hydrogen sulphide and carbon dioxide in tail tanning pits, B., 114.
- Izumi, S. See Ugai, T.
- Izumrudova, T. L., antiscorbutic action of juice of raw sorrel and of rhubarb, A., 546. Antiscorbutic action of the concentrate from the sulphited black-current, obtained in factory conditions, A., 1287.
- J.
- Jaanus, R., magnetisation curve of single iron crystals, A., 1309.
- and Shur, J., character of binding in the carbon monoxide molecule, A., 1193. See also Shur, J.
- Jaap, R. H., gonad-stimulating potency of individual pituitaries, A., 1544.
- Jaatinen, I. See Routala, O.
- Jableczyński, K., and Koschany, W., kinetics of coagulation of colloidal gold, A., 1074.
- Jablonski, A., yield of fluorescence in aqueous fluorescein solutions on anti-Stokes excitation, A., 429. Photoluminescence of dye phosphors, A., 682. Negative polarisation of phosphorescence of adsorbed dye molecules, A., 915. Time decrement of light due to polarised fluorescence of dye solutions, A., 915. Polarisation of photoluminescence of dye solutions, A., 1302. and Szymanowski, W., thermal rotations of fluorescent molecules and duration of luminescence, A., 681.
- Jablonski, L., action of iron compounds on vegetable[tanned] leather, B., 323.
- Jacek, W., velocity of formation of an amorphous precipitate of sulphur, A., 1082.
- Jachontova, E. L. See Kuzminich, I. N.
- Jacini, G., apigenin from marguerites (*Chrysanthemum leucanthemum*), A., 673.
- Jack, E. L., and Bechdel, S. I., influence of thyroxine on milk secretion, A., 1147.
- Jacks, G. V., determination of fertiliser requirement of soils, B., 515.
- Jackson, A. B. See General Electric Co.
- Jackson, C. A. See Pyott, W. T.
- Jackson, Carroll E. See Iddles, H. A.
- Jackson, Clarence E., and Saeger, C. M., jun., use of the pipette method in fineness test of moulding sand, B., 496.
- Jackson, Deborah A. See Shelling, D. H.
- Jackson, Derek A., magnetic moment of nucleus of caesium, A., 272. Intensity ratio of hyperfine structure components of the caesium line 4555 Å., A., 556. and Kuhn, H., hyperfine structure of resonance lines of potassium, A., 555.
- Jackson, D. D., and Amer. Machine & Foundry Co., coating [ferrous] metals with lead, (P.), B., 314.
- Jackson, D. E., analgesia and anaesthesia with special reference to such substances as trichloroethylene and vinesthene (divinyl ether), A., 893. Variations in reaction of different parts of the central nervous system as influenced by depressant and stimulating drugs, A., 1158.
- Jackson, D. H. See Burmah Oil Co.
- Jackson, E. L., mono- and tri-choline orthophosphates, A., 1486. and Hudson, C. S., derivatives of *l*-α-rhamnohexonic acid; synthesis of *l*-α-rhamnohexonolactone, A., 66.
- Jackson, F. G., oxidation of ceramic ware during firing. VII. Review, B., 851. Resistance of clays to gas penetration, B., 1044.
- Jackson, F. K., health and vigour of the cotton plant in relation to environment, B., 821.
- Wad, Y. D., and Panse, V. G., supply of humus to soils, B., 514.
- Jackson, F. W., and Sigilman, I. G., insulation, (P.), B., 1074.
- Jackson, G., and Morris, A. J., brine method of salting brick cheese, B., 1161.
- Jackson, Harold, Klein, Louis, and Wilkinson, J. F., iron and copper contents and haemopoietic activities of stomach and liver preparations, A., 514.
- Jackson, Harold (Garstang), artificial ageing of rubber, B., 369. See also Leyland & Birmingham Rubber Co.
- Jackson, Harold (Manchester). See Heilbron, I. M.
- Jackson, Henry, jun. See Taylor, F. H. L.
- Jackson, H. C. See Elvehjem, C. A., Rounoy, Z. D., and Weckel, K. G.
- Jackson, H. M. See Chick, H.
- Jackson, J. See Cuthill, R.
- Jackson, K. S. See Imperial Chem. Industries.
- Jackson, R. W. See Gordon, W. G., and White, Abraham.
- Jackson, V. T., micro-burner, A., 1096.
- Jackson, W., conductivity-temperature studies on paraffin waxes, A., 915. Mechanism of dielectric loss in paraffin wax solutions at high radio frequencies, A., 916.
- Jackson, W. F., photochemical carbon monoxide oxidation, A., 177. Mechanism of carbon dioxide and hydrogen peroxide formation, A., 310.
- Jackson, W. G., apparatus for drying broken stones, ores, cereals, etc., (P.), B., 434.
- Jackson, W. J., ratio of thermal coefficient of expansion to specific heat at constant pressure for tungsten, A., 1454. See also Pitt, A.
- Jackson, W. S. See Hart, C.
- Jackson & Moreland. See Standard Oil Development Co.
- Jacob, A. See Schwartz, A.
- Jacob, Arthur, influence of potassium manuring on chemical composition of the crop, B., 324. Influence of manuring on quality and suitability of foodstuffs and fodders, B., 567. Magnesium supply of plants, B., 967.
- Hofmann, U., Loofmann, H., and Maegdefrau, E., chemical and X-ray investigation of the mineral adsorption substance in the soil, B., 1060.
- Jacob, E., sowing of grass in drills, B., 282.
- Jacob, H. See Schild, E.
- Jacob, Hans. See Steinkopf, W.
- Jacob, J. B. See Universal Oil Products Co.
- Jacob, K. D., Bartholomew, R. P., Brown, B. E., Pierre, W. H., Reid, F. R., and Tidmore, J. W., nutrient value of phosphorus in calcined phosphate as determined by growth of plants in greenhouse experiments, B., 966. See also Marshall, H. L., and Reynolds, D. S.
- Jacob, M. See Lemarchands, M.
- Jacobi, R. See Freudenberg, K.

- Jacobs, F., fireproofing of rubber; rubber flooring for marine vessels, B., 737.
- Jacobs, G. H. See Bowyer, W. W.
- Jacobs, G. W., apparatus for control of pressure in distillation, A., 321.
- Jacobs, L., latent heat of fusion of equilibrium mixtures of light and heavy water, A., 704.
- Jacobs, M. H., and Parpart, A. K., osmotic properties of the erythrocyte. V. Rate of hemolysis in hypotonic solutions of electrolytes, A., 229.
- Jacobs, P. B. See Levine, M.
- Jacobs, R. B. See Goetz, A.
- Jacobs, S. E., nitrifying power, glucose-decomposing power, and productivity in different soil types, B., 325.
- Jacobs, W. A., and Craig, L. C., ergot alkaloids. IV. Cleavage of ergotinine with sodium and butyl alcohol. V. Hydrolysis of ergotinine. VI. Lys-ergic acid, A., 504, 1137, 1512. Structure of ergot alkaloids, A., 504. Ergot alkaloids, A., 764. Hydrolysis of ergotinine and ergoclavine, A., 872. Alkaloid from ergot, A., 1137.
- and Elderfield, R. C., *Digitalis* glucosides. VIII. Degradation of the lactone side-chain of digitoxigenin, A., 88. Structure of the cardiac aglucones, A., 218, 497. Strophanthin. XXXII. Anhydrostrophanthidin, A., 624.
- and Simpson, J. C. E., *Digitalis* saponin, A., 1130.
- See also Simpson, J. C. E.
- Jacobsen, A., and Schou, S. A., alkaloid content of cinchona bark and decoctions, B., 205.
- Jacobsen, A. E., and Reynolds, C. E., determination of hiding power of paints, B., 69.
- Jacobsen, E., the intestine as a storage depot for ascorbic acid, A., 669.
- See also Iversen, P.
- Jacobsen, J. E., cause of low stability of vitamin-C in milk, A., 1005.
- Jacobsen, J. N., and Pfaudler Co., treatment of liquids, (P.), B., 290, 610.
- Jacobsen, M. See under Baggild & Jacobsen.
- Jacobsen, R. P. See Drake, N. L.
- Jacobsohn, F., materials containing bitumen and tar or mixtures of different tars for roads and underground construction, (P.), B., 662.
- Jacobsohn, I. See Eisler, M.
- Jacobsohn, K., fine-grain development with *p*-phenylenediamine, B., 574, 879. Influence of admixtures checking or promoting the ripening of positive [photographic] emulsions, B., 830.
- Jacobsohn, K. P., and Da Cruz, A., temperature coefficient of fumarase, A., 249.
- Pereira, F. B., and Tapadinhas, J., thermodynamics of the fumarase system, A., 121.
- and Tapadinhas, J., enzymic equilibrium, A., 401. Biological action of iodoacetic acid and fluoride; fumarase, A., 658. Inactivation of fumarase, A., 1536.
- Tapadinhas, J., and Pereira, F. B., synthesis of aspartic acid from fumaric acid in the liver, A., 1530.
- Jacobson, B. H., and Klipstein Chem. Processes, Inc., treatment of metal [melting of aluminium], (P.), B., 505.
- Jacobson, B. M., serum-protein precipitated by Hayem's solution, occurring in multiple myeloma, A., 1402.
- Jacobson, R. A. See Du Pont de Nemours & Co., E. I.
- Jacobson, D. D. See Finnegan, T. J.
- Jacobus, D. S., and Babcock & Wilcox, Ltd., cleaning of steam from a steam boiler, (P.), B., 434.
- Jacobus, R. A., and Radio Corp. of America, grid electrode [for radio valves], (P.), B., 1001.
- Jacoby, H. S., chemical plant construction, B., 881.
- Jacqué, L., hydrogen problem in hydrogenation of fuels, B., 85.
- Jacquemain, R., di-tertiary diols derived from diacetone alcohol (β -hydroxy- β -methylpentan-8-one), A., 194.
- Jacquemain, R. P., and Doll, J. H., influence of time, light, and temperature on the keeping of hypochlorite solutions, A., 1331.
- Jacques, A. G., accumulation of electrolytes [in plants]. VII. Organic electrolytes. I. and II., A., 266, 552. Kinetics of penetration. X. Guanidine, A., 1179. and Osterhout, W. J. V., kinetics of penetration. XI. Entrance of potassium into *Nitella*, A., 1239.
- Jacques, L., rotatable furnaces for metallurgical purposes, (P.), B., 460.
- Jacquet, P. A., adsorption of colloids on metallic surfaces and its influence on structure of electrical deposits, A., 294. Adhesion of electrolytic copper deposits, B., 233. Action of colloids in electrolytic baths, B., 361. Electrolytic method for obtaining bright copper surfaces, B., 730.
- Jacquet, P. J., and Du Pont Rayon Co., multi-coloured [rayon] threads, (P.), B., 898.
- Jacquinet, P., Zeeman effect of mercury and perturbations, A., 272. Fine structure of components in Paschen-Back effect of multiplets, A., 423.
- See also Dupouy, G.
- Jacquot, R. See Bonnet, R.
- Jacobson, H. G., preparation of a body capable of lowering the [physiological] uric acid level, (P.), B., 974.
- Jacyna, V., properties of real gases according to thermodynamic equation of state. II. Joule-Thomson effect for helium. III. Specific heats c_p and c_v , and the compressional and expansion coefficients, β and α , of helium. IV. V. Compressibility of helium below the critical state in the range 4.34–2.59° abs. VI. Critical region of helium. VII. Boyle's law for helium. VIII. The inversion line of the Joule-Thomson effect for helium, A., 22, 156, 437, 925, 1064, 1198. "Near" and "far" action in the thermodynamic equation of state, A., 925. Principle of the "dominant action" in the thermodynamic equation of state, A., 925. ψ_0 -Value according to the new equation of state, A., 925. Experimental confirmation of the new theory of the equation of state, A., 1313. Absolute temperature of the normal freezing point of water; ψ_0 -limiting value, A., 1454.
- Derevjankin, S., Obnorski, A., and Parfentiev, T., Jacyna's selection theorem for helium, A., 143. Thermodynamic theory of equation of state, A., 437. Equation of state for helium in the intermediate region of temperature, A., 574. Boyle's law in the new theory of the equation of state, A., 691.
- Jadassohn, W., and Schaaf, F., depigmenting action of *l*-ascorbic acid; hyperpigmentation produced by folliculin and vitamin-C, A., 417.
- Jadhav, G. V., and Rangwala, Y. I., condensation of *p*-bromophenol and bromocresols with benzoyl chloride and *m*- and *p*-nitrobenzoyl chlorides, A., 339. Bromination of substances containing two aromatic nuclei. I. Bromination of tolyl and nitrophenyl benzoates. II. Bromination of phenyl and tolyl esters of *m*- and *p*-nitrobenzoic acids, A., 746, 856.
- See also Hirwe, N. W.
- Jaekel, R., disintegration of neon by neutrons, A., 1297.
- Jäger, A. See D'Ans, J.
- Jaeger, A. O., and Amer. Cyanamid & Chem. Corp., separation of carbazole from anthracene, (P.), B., 894. Plasticiser, (P.), B., 914.
- Daniels, L. C., and Amer. Cyanamid & Chem. Corp., aralkylarylcarboxylic acids, (P.), B., 940.
- See also Daniels, L. C., Selden Co., and Selden Res. & Eng. Corp.
- Jaeger, F. M., and Beintema, J., symmetry and structure of crystals of hydrochlorides of triaminotriethylamine, A., 687.
- and Dijk, J. A. van, complex salts of 2:2'-dipyridyl with bivalent copper. II., A., 167. Complex salts of 2:2'-dipyridyl with zinc and cadmium. I. and II., A., 312, 714.
- Fonteyne, R., and Rosenbohm, E., specific heats of solid substances at high temperatures. XVIII. Use of Dewar vacuum vessels in the metal block calorimeter for the control of the cooling rate, A., 924.
- and Rosenbohm, E., specific heats of metals at high temperatures. XVII. Calorimetric retardation phenomena of cerium and chromium, A., 21.
- See also Poppema, T. J.
- Jaeger, G. See Deuts. Gold- & Silber Scheideanstalt vorm. Roessler.
- Jäger, H., basic thermotechnical principles of coke-oven operation, B., 612.
- Jaeger, J. C., and Hulme, H. R., internal conversion of γ -rays with the production of electrons and positrons, A., 557.
- Jaeger, M. See I. G. Farbenind.
- Jaeger, P., space-charge measurements in beeswax during solidification and in the solid state, A., 282.
- Jaeger, R., true and apparent absorption coefficient of inhomogeneous X-rays (intensity and dose absorption coefficients), A., 272. Derivation of a group of X-ray absorption curves from a single curve, A., 284.
- Jänecke, E., potassium models; spatial representation of saturation relations of potassium salts, A., 16.
- Jaenieke, J., Haber's investigations on occurrence of gold in sea-water, A., 468.
- See also Metallges. A.-G.
- Jaffard, R. M., relationships between internal structure and mechanical properties of fibres and their solutions, B., 1135.
- Jaffe, H., metallic compound of lithium and ammonia, A., 590.
- Jaffe, H. L. See Bodansky, A., and Master, A. M.
- Jaffray, A. B., evaluation of Australian-grown pyrethrum flowers, B., 1061.

- Jaffray, A. B. See also Finnemore, H.
- Jage, F. See Zerbe, C.
- Jagitseh, R., thermal investigation of aluminium hydroxide-aluminium oxide by emanation method, A., 1333.
- Jahiel, R. See Delaunay, S.
- Jahn, C. See Powell, Alan R.
- Jahn, D., effect of creatine on carbohydrate metabolism, A., 1151.
- Jahn, E. C., testing fibre building boards and pulp, B., 1039.
- Jahn, H. A., rotation and vibration of the methane molecule, A., 1193.
- Jahoda, F. G., polarographic examination of aqueous solutions of formaldehyde, A., 1107. Polarographic studies with the dropping mercury cathode. LIV. Electro-reduction of formaldehyde, A., 1462.
- Jahr, K. F. See Harms, J., and Jander, G.
- Jahrstorfer, M. See Pungs, W.
- Jaitshnikov, See under Yaitshnikov.
- Jakimkin, N. A. See Urazovski, S. S.
- Jakimov, M. N., and Kuminova, E. I., isothermic evaporation at 25° of Lake Kutschuk water, with determination of vapour pressure in relation to the concentration, A., 953.
- Jakimov, P. A., Kojalovitch, N. B., and Krusser, O. V., *Saxifraga crassifolia* as an industrial plant, B., 963.
- Jakob, G., separation of hops and sediment [from wort], B., 569.
- Jakob, M., continuation of saturation curve of water vapour above the critical point, A., 815.
- and Fritz, W., heat of vaporisation of water and specific volume of saturated vapour up to 200 kg. per sq. cm. (365°), A., 1454.
- and Linke, W., heat transference by vaporisation of liquids from vertical and horizontal surfaces, B., 481.
- Jakobsson, L. A., and Tschernjak, F. S., clinical significance of the level of blood-iodine in Graves' disease and toxic goitre and the therapeutic action of tissue hydrolysates, A., 888.
- Jakosky, J. J., and Electroblacks, Inc., electrothermal dissociation of organic liquids, (P.), B., 462.
- Jakovenko, M. J. See Girko, P. A.
- Jakovkin, A. A., Markov, S. S., and Kremleva, E. A., thermal decomposition of aluminium nitrate, A., 945.
- Jakovlev, A. V., determination of active chlorine by a combined reagent, A., 52.
- Jakovlev, K. P., disintegration of lithium atoms by slow protons, A., 559.
- Jakovlev, N. N., effect of repeated ingestion of sugar and starch on blood-sugar; muscular lactacidogen and glycogen in cases of complete and partial inanition, A., 522.
- See also Iljin, V. S.
- Jakovlev, V. G., decoloration of beeswax by adsorbent clays of the Voronezh district, B., 958.
- Jakovleva, A., influence of nitrogen on fluorescence of cyanogen, A., 1054.
- Jakuba, E. See Gorn, A.
- Jakubovitch, S., and Terekhov, K., influence of components of a lacquer on its resistance to the action of air, B., 33.
- Jakubovitch, A. J., condensation of diketocompounds with nitromethane. I. Condensation of α -diketones, A., 347.
- and Vorobjova, E., derivatives of phenanthraquinone, A., 1372.
- See also Scherlin, S. M.
- Jakubowski, W., beechwood tar from the Polish Carpathians, its composition and value, B., 613.
- Jakubson, S. I. See Plotnikov, V. A.
- Jalovoi, P., conditions of formation of Widmanstätten structure in plain carbon steels, B., 499.
- Jalowetz, E., and Hamburg, M., coffee substitutes from cereals, (P.), B., 1116.
- Jambuserwala, G. B. See Rowe, F. M.
- Jame, L., Crosnier, R., and Morel, F., action of intestinal bacteria on α -esculin-gelatin, A., 1028.
- James, D. I., function of sulphuric acid in nitration, A., 967.
- James, F. W. See Emelús, H. J.
- James, G. V. See Ungley, C. C.
- James, H. M., wave-mechanical treatment of the Li_2 molecule, A., 15, 279.
- Influence of inner shells on atomic interactions, A., 15.
- and Coolidge, A. S., ground state of H_2 , A., 423.
- See also Coolidge, A. S.
- James, J. H., and Byrnes, C. P., fractionation of partial oxidation products, (P.), B., 13. Separating or extracting substances from partial oxidation products, (P.), B., 664.
- James, L. H. See Phillips, Max, Straka, R. P., and Swenson, T. L.
- James, R. L., expressing mechanical analysis of many common soils, B., 565.
- James, R. W., intensities of X-ray spectra and imperfections of crystals, A., 16.
- James, S. P., chemotherapy of malaria, A., 1527.
- James, T. H., lecture demonstration of the law of combining volumes, A., 467.
- Blair, J. M., and Germann, F. E. E., influence of salts on intermittent photographic exposures, A., 177. Action of water on latent photographic image, A., 311.
- James, W. O., rate of photosynthesis, A., 1212.
- Jamet, A., use of kaolin in determination of non-tans [in tannin analysis], B., 1007.
- Qualitative tannin analysis, B., 1007.
- Determination of formic acid in industrial lactic acid, B., 1084.
- Jamieson, G. S., and McKinney, R. S., pat[*a*]ua palm oil (*Enocarpus pataua*, Mart.), B., 276. Phosphatides in American soya beans and oil, B., 559.
- Caprifid fig-seed oil, B., 640. Bagilumbang or soft lumbang [*Aleurites trisperma*] oil, B., 813. California raisin- [grape-]seed oil, B., 1101.
- See also McKinney, R. S.
- Jamieson, J., influence of rate of shear on shearing strength of lead, B., 153.
- Jamison, E. A., and Bateman, W. H., propane and butane as industrial fuels, B., 212.
- See also Bateman, W. H.
- Jamm, W. See Bischoff, K.
- Janczak, W., centigram (semi-micro-) analysis of inorganic substances. II. Brass. III. Dolomite, A., 1095.
- Jandebeur, W. See Schmidt, Erich.
- Jander, G., and Ebert, A., applicability of conductometric methods with visual observation to titrations in presence of much indifferent electrolyte, A., 1476.
- and Harms, J., use of conductometric titrations with visual observation in microchemical tests: titration of minute amounts of arsenic, A., 1092.
- Jander, G., Harms, J., and Jahr, K. F., conductometry, A., 947.
- and Jahr, K. F., hydrolysis of inorganic salts and chemistry of high-molecular hydrolysis products including iso- and hetero-poly-compounds. I. and II., A., 181, 703.
- See also Stüber, C.
- Jander, W., and Weitendorf, K. F., reactions in the solid state at high temperatures. XII., A., 944.
- Jandolo, C., gastric and pancreatic digestion of lecithin, A., 653.
- Jane, R. S. See Mason, G. M.
- Janensch, I., degree of purification of [brewery] transport casks, B., 76.
- Source of danger for beer stability, B., 603.
- Janensch, T., what precautions are to be taken in transmitting disinfectants containing hydrofluoric acid for determination of bactericidal activity? B., 976.
- Janes, R. B., diamagnetic susceptibilities of palladium salts, A., 573. Magnetic susceptibilities of salts of the iron group elements, A., 1063.
- Janeway, P. W., jun., and United Gas Improvement Co., manufacture of gas by admission of high-carbon oil to generator during blow-run, (P.), B., 711.
- Janicki, J. See Chrzyszcz, T.
- Janke, A., and Jirak, Leopold, decomposition and conservation of hens' eggs, B., 875.
- and Kropacsy, S., reaction vessel for measurement of microbiological gas metabolism, A., 798. Mechanism of the acetic acid fermentation, A., 1029. Determination of ethyl alcohol and its oxidation products in biological substrates, A., 1044.
- and Sekera, F., determination of hydrogen exponent by means of the step-photometer, A., 1043.
- Jannek, J. See Standard-I. G. Co.
- Janniah, S. L. See Rao, K. A. N.
- Janot, M. M., analysis of a genuine Salvador balsam (balsam of Peru), B., 876.
- Janovskaja, B. See Jarussova, N., and Lavrov, B. A.
- Jansen, B. C. P., identity of vitamin- B_2 and flavin and nomenclature of vitamins, A., 545.
- Jansen, E. F. See Hilbert, G. E.
- Jansen, R. E., application of bituminous shale in the cement industry, B., 805.
- Jansen, W. H., Heyes, J., and Richter, C., application of spectrum analysis to determination of alkalis and alkaline earths. IV. Micro-determination of potassium and calcium, A., 185.
- Janson, A. See Freudenberg, K.
- Janssen, C. See Ornstein, L. S.
- Janssen, S., reflector effect on water and sodium chloride excretion, A., 1399.
- Jansson, J. I. See Palomaa, M. H.
- Jantzon, H. See Kirsch, W.
- Janus, R. See Drożdżina, V.
- Jány, J., determination of acid in dyed chrome[-tanned] leather by Meunier's method, B., 323. Analysis of albumin [for leather finishes], B., 746.
- and Sellei, C., effect of some toxic gases on cell metabolism, A., 398.
- Japolsky, N. S., theory of elementary particles. II. Electromagnetic whirls and elementary particles, A., 1442.

- Jaques, E. D.**, apparatus for crushing stone, ore, and other materials, (P.), B., 786.
- Jarach, M.**, presence of lithium in waters from the Turin hills, A., 1343.
- Jaretsky, R.**, plants with cardiac action, A., 1019. Alkaloid content and activity of saprophytic ergot cultures, A., 1040.
- and **Ulbrich, H.**, intraplasmatic processes during formation of mucilage in the seeds of *Linum usitatissimum*, L., and in the roots of *Althaea officinalis*, L., A., 133.
- Jarlikov, M. M.**, equilibria in the systems $KCl-H_2O-NH_4Cl$ and $NaCl-H_2O-NH_4Cl$, A., 303.
- Jarløv, E.** See **Gad-Andersen, K.**
- Jarosch, W.**, hydrolysis of phytin compounds from seeds of hemp, beans, flax, horse chestnut, and wheat and from rye embryos, A., 134.
- Jaroszewicz, W.**, and **Sucharda, E.**, products of reaction of diazomethylsulfonic acid with glycerol; (synthesis of new foam-promoting compounds), A., 338. Synthesis of 1:3:5-tripyrindylbenzene, A., 360.
- Jarrett, M. E. D.** See **Britton, H. T. S.**
- Jarrett, R. F.** See under **Brit. Unit Heat Co.**
- Jarrousse, J.**, hydrogenation of phenylpyruvic acid, A., 488.
- Jarussova, N.**, canned food enriched with vitamin-C by addition of fir-needle concentrate, A., 1287. Sources of vitamins. IV. Fresh and salted cucumber and dried carrots as sources of vitamin-C. VI. Mandarins, water-melons, fresh and dried black currants, service [mountain ash] berries, and cranberries as sources of vitamin-C. VIII. Fruit conserves with pine-needle extract antiscorbutic concentrate. IX. Vitamin-C in boiled cabbage. X. Antiscorbutic activity of tinned foods after addition of pine-needle concentrate, B., 171, 747.
- and **Janovskaja, B.**, food-stuffs as vitamin-bearers. II. Vitamin contents of spinach preserves and of garlic after winter-storage, A., 417. Sources of vitamins. V. Garlic and sorrel as sources of vitamin-C, B., 171.
- See also **Lavrov, B. A.**
- Jary, S. G.**, and **Austin, M. D.**, control of the hop red-spider mite (*Tetranychus telarius*), B., 1012.
- See also **Austin, M. D.**
- Jasinska, M.** See **Szper, J.**
- Jasmatzi, A.** See **Lejeune, F.**
- Jatkar, S. K. K.**, Raman spectra of *cis*- and *trans*-decalins, A., 1446.
- See also **Bhatt, N. B.**, **Gajendragad, N. G.**, **Mehta, D. N.**, **Nevgi, G. V.**, **Padmanabhan, R.**, and **Rao, M. M. R.**
- Jatrides, D.** See **Thomis, G. N.**
- Jatzun-Vischnevskaja, G.** See **Reformatski, S.**
- Jaubert, G. F.**, hydrogen, (P.), B., 803.
- Jauch, O.** See **Simon, Arthur.**
- Jaulmes, P.**, determination of volatile acidity of wines, B., 203. Distillation and rectification of dilute solutions of volatile substances. I. Theoretical study and the case of heavy water, II. Efficiency of laboratory columns, B., 609, 839.
- and **Espezel, P.**, determination of acetaldehyde in wines and spirits, B., 920.
- Jaumann, A.**, agglomeration of artificial silk fibrils, B., 666.
- Jaumann, J.**, and **Stipa, V.**, electrostriction of gases, A., 12.
- Jauncey, G. E. M.**, and **Claus, W. D.**, diffuse scattering of X-rays from sylvine, A., 151.
- and **Deming, J. H.**, extra negative term in the incoherent part of diffuse scattering of X-rays from neon-like crystals, A., 1448.
- See also **Hughes, A. L.**
- Jauneau, G.** See **Taboury, M. F.**
- Jausseran, C.**, action of aqueous solutions on photographic latent images of varying ages, A., 943.
- Javillier, M.**, and **Djelatides, D.**, determination of protein in wheat flour and assessment of baking value of wheat, B., 250.
- and **Lavollay, J.**, determination of magnesium using 8-hydroxyquinoline, A., 186.
- Javorovskaja, S. F.** See **Khomjakov, K. G.**
- Javorskaja, E. V.** See **Berkenheim, A. M.**
- Jaworski, R.** See **Musierowicz, A.**
- Jdanova, N. V.** See **Uschakov, M. I.**
- Jean, G.** See **Roche, J.**
- Jean, M.**, determination of copper in steel, B., 360.
- Jean, M. L.**, apparatus for determining carbon dioxide in the air, A., 466. Determination of small quantities of iodides; application to determination of small quantities of different metals, A., 717.
- Jeavons, W. R.**, and **Rentschler, M. J.**, apparatus for producing solutions [for admixture with clay], (P.), B., 805. Refining of metals, (P.), B., 810.
- See also **Rentschler, M. J.**
- Jedele, A.**, metallographic etching of platinum, B., 412.
- Jeddeloh, B. zu.** See **Hoff, F.**
- Jeffersen, M. A.** See **Bell, R. M.**
- Jefferson, M. E.** See **Maxwell, L. R.**
- Jefferson, R. E.** See **Rhead, T. F. E.**
- Jefferson, R. N.** See **Schoene, W. J.**
- Jeffery, G. H.**, and **Vogel, A. I.**, dissociation constants of organic acids. XI. Thermodynamic primary dissociation constants of some normal dibasic acids, A., 302.
- See also **Vogel, A. I.**
- Jeffrey Manufacturing Co.**, hydraulic washing, cleaning, and separating apparatus, particularly adapted for cleaning coal, (P.), B., 434, 610.
- Jeffreys, C. E. P.** See **Borsook, H.**
- Jeffreys, H.**, relation between fusion and strength, A., 688.
- Jeglum, C. H.**, sodium sesquisulfate: its detergent applications, B., 462.
- Jelley, E. E.**, micro-refractometer and its use in chemical microscopy, A., 320. Pleochroism of crystals of rare-earth salts as evidence of non-rotation of certain electronic orbits, A., 1188.
- Jellinek, K.**, and **Siewers, H.**, metal displacement equilibria in fused halides, oxides, and pyrophosphates, A., 168.
- and **Wannow, H. A.**, vapour pressures and activities of completely and incompletely miscible binary and ternary alloys with one and two volatile components, A., 927.
- Jellinek, S.**, alternating-current corrosion. I, B., 855.
- Jellinghaus, W.**, two-component system iron-tantalum, A., 1199.
- See also **Wever, F.**
- Jen, C. K.**, multipole radiation and quantum selection rules for central field atoms, A., 279.
- Jenaer Glaswerk Schott & Gen.**, filters, (P.), B., 50. Filter devices of glass, (P.), B., 307. Funnels for filtering the precipitate of liquids, (P.), B., 788.
- Jenckel, E.**, phases formed by reduction of mixtures of iron oxide with other oxides, A., 35. Alloys of aluminium with gallium, A., 291. Constitution of glasses, A., 704.
- and **Bräucker, E.**, reduction of rate of solution of aluminium in hydrochloric acid by β -naphthoquinoline, A., 309.
- Jendrassik, A.**, and **Papp, S.**, determination of silver in "katadynised" wine and similar liquid foodstuffs, B., 744.
- Jendrassik, L.**, and **Bokréts, A.**, biochemical gravimetric methods. IV. Microdetermination of cholesterol by the torsion balance, A., 270.
- and **Takács, F.**, photometric determination of calcium and oxalic acid, A., 54. Determination of potassium in body-fluids, A., 134.
- See also **Cleghorn, R. A.**
- Jeney, A. von.**, and **Méhes, J. von.**, effect of glycerophosphate and lecithin-fatty acids on sensitivity of cats to adrenaline, A., 1532.
- Jenkins, C.**, [stopper for] water-softening or filtering apparatus, etc., (P.), B., 1078.
- Jenkins, C. H. M.**, behaviour of mild steel under prolonged stress at 300°. II. Concentrated stress in notched and drilled specimens, B., 951.
- and **Bucknall, E. H.**, interrelation of age-hardening and creep performance. I. Age-hardening of nickel-silicon-copper alloys, B., 952.
- and **Mellor, G. A.**, behaviour of metals under deformation at high temperatures. I. Structural changes in mild steel and commercial irons during creep, B., 951.
- Jenkins, E. W.** See **Cummings, M. B.**
- Jenkins, F. A.**, and **McKellar, A.**, redetermination of mass ratio of lithium isotopes from the band spectrum, A., 140.
- and **Strait, L. A.**, spectrum of AsO, A., 280.
- Jenkins, G. L.**, and **Millett, S.**, assay of National Formulary preparations containing bismuth, B., 973.
- Jenkins, H. C.**, apparatus for [heat] treatment of coal, etc., (P.), B., 792.
- Jenkins, H. O.**, and **Sutton, L. E.**, electrical polarisation of concentrated solutions of nitrobenzene with special reference to the validity of the Sugden relation, A., 817.
- Jenkins, J. M.**, **Thompson, R. C.**, **McNeal, D. R.**, and **Andale Co.**, treatment of gas and apparatus therefor, (P.), B., 537.
- Jenkins, P. G.**, and **Gas Light & Coke Co.**, rotary washing or mixing apparatus, (P.), B., 434.
- Jenkins, R. L.**, **Norris, J. F.**, and **Swann Res. Inc.**, carbolic acid [phenol], (P.), B., 93.
- Schilb, T. W.**, and **Swann Research, Inc.**, finely-divided [chlorinated diphenyl] powders, (P.), B., 761.

- Jenkins, R. L., and Swann Research, Inc., adhesive composition [from chlorinated polyphenols], (P.), B., 281. Composition for moisture- and water-proofing, and materials coated therewith, (P.), B., 354. Coating composition [from chlorinated polyphenols], (P.), B., 736. Adhesive composition, (P.), B., 739.
- Jenkins, R. O., oxide films on liquid metals studied by means of electron-diffraction, A., 294.
- Jenkins, S. H., biological oxidation of carbohydrates. IV. Phosphorus requirements of percolating filters, A., 255. Organic manures, B., 1158.
- See also Norman, A. G.
- Jenkins, U. S., and Jenkins Petroleum Process Co., cracking of hydrocarbon oils, (P.), B., 663.
- Jenkins, V. N. See Texas Co.
- Jenkins Co., G. O. See Richter, H. W.
- Jenkins Petroleum Process Co. See Jenkins, U. S., and Smith, A. D.
- Jenkner, A. See Nettlebusch, L.
- Jenks, W. F., pegmatites at Collins Hill, Connecticut, A., 1346.
- Jenness, L. G. See Intermetal Corp.
- Jenney, P. See Kerr, P. F.
- Jennings, J. H. See Gen. Electric Co.
- Jennings, J. M. See Standard-I.G. Co.
- Jennings, J. S., Sharratt, B., and Wardlaw, W., compounds of α -benzoinoxime with bivalent metals, A., 981.
- Jennings, W. H. See Pennington, W. A.
- Jennings, W. P., and McGookin, A., reactivity of unsymmetrical distyryl ketones, A., 85.
- Jennison, H. C., and Amer. Brass Co., press [cap] and [lead-in] wire for incandescence [electric] lamps, radio tubes, etc., (P.), B., 908.
- Jenny, A., and Budiloff, N., photography on aluminium (See-Foto process), B., 1023.
- Jenny, F. J. See Sherwood, T. K.
- Jenny, H., clay content of soil as related to climatic factors, particularly temperature, B., 964.
- and Leonard, C. D., functional relationships between soil properties and rainfall, A., 61.
- and Reitemeier, R. F., ionic exchange in relation to stability of colloidal systems, A., 932.
- and Smith, G. D., colloid-chemical aspects of clay-pan formation in soil profiles, B., 686.
- Jensen, B. N. See Oxe, M.
- Jensen, H. (Baltimore), toad poisons. VII. *Bufo arenarum*, *Bufo regularis*, and *Xenopus laevis*, A., 1502.
- Chen, K. K., and Lilly & Co., E., preparation of products from toad poisons, (P.), B., 174.
- and Evans, E. A., jun., crystalline insulin; nature of free amino-groups in insulin and isolation of phenylalanine and proline from crystalline insulin, A., 411.
- See also Schock, E. D.
- Jensen, H. (Hamburg), exchange in the Thomas-Fermi atom, A., 279. Stability of ionic lattices, A., 284.
- Jensen, H. B. See Billmann, E.
- Jensen, K. A., constitution of phosphate complexes of iron and aluminium, A., 166. Thiosemicarbazide compounds of bivalent palladium and platinum, A., 202. Constitution of thiosemicarbazide compounds of nickel, A., 202.
- Jensen, K. A. See also Billmann, E.
- Jensen, P. See Ruggli, P.
- Jenson, J. B., and Marks, J. A., coal-carbonising apparatus, (P.), B., 935.
- Jenssen, J. D., and Jenssen Co., G. D., heat-recovery and washing system for sulphite pulp, (P.), B., 799.
- See also De Jahn, F. W.
- Jenssen Co., G. D. See Jenssen, J. D.
- Jentgens, H., hyperglycemia produced by salts, A., 781.
- Jentschke, W. See Stetter, G.
- Jentz, C. D., jun., flash-roasting pyrite with the Nichols-Freeman system [for making sulphur dioxide] in manufacture of sulphite pulp, B., 411.
- Jephcott, C. M., determination of methyl alcohol in the air, B., 1120.
- Jephcott, H., cereal food products, (P.), B., 1067.
- Jeppesen, M. A., and Bell, R. M., Allison magneto-optic method of analysis, A., 722. Raman spectrum of orthophosphoric acid, A., 914.
- Jermolenko, N., sedimentation thixotropy of stabilised suspensions, A., 1320.
- Jermstad, A., Bornträger's reaction and its use in identifying drugs containing hydroxymethylanthraquinone and galenicals, B., 429.
- and Östby, O., preparation of tinctures, B., 700.
- Jerofojev, B. V. See Kobosev, N. I.
- Jeru, I. I. See Prokopetz, E. I.
- Jerzmanowska-Sienkiewiczowa, Z., new mode of formation of hydantoin derivatives, A., 992.
- Jeschki, K., peroxidase reaction of high-temperature and momentarily-heated milk, B., 571.
- Jesse, W. P., apparatus for X-ray quantitative chemical analysis with the cathode-ray tube, A., 466. X-Ray determination of chemical composition of oxide-coated cathodes, A., 1449.
- Jessel, R., effect of dissolved air on specific heat of water, A., 20.
- Jessen, C. C., and Atlas Powder Co., [pot] spinning of [cuprammonium] artificial silk, (P.), B., 798.
- Jessen, V., and Wedekind, E., magnetism of wood ashes, B., 408.
- Jesser, L., cement hardening: an electrostatic phenomenon. I. and II., B., 547, 852.
- Jesserer, H. See Lieben, F.
- Jessup, D. A. See Mease, R. T.
- Jessup, R. S., and Cummings, A. D., heats of combustion of rubber and of rubber-sulphur compounds, B., 240.
- and Green, C. B., heat of combustion of standard sample benzoic acid, A., 168.
- Jett-Jackson, C. E. See Sauer, J. J.
- Jette, E. R., intermetallic solid solutions, A., 24, 1067.
- Jeune, M. See Chalier, J.
- Jeunehomme, W., mechanism of electrochemical chlorination of benzene, A., 45, 709.
- See also Goldfinger, P.
- Jevtuchova, M. L. See Vasilenko, V. C.
- Jewett, J. E. See Nat. Aniline & Chem. Co.
- Jeziarski, T. W., and Spotowska, M., 9:10-dihydroxy-9:10-di-*n*-butyl-9:10-dihydrophenanthrene and 2:2'-di-*n*-valeryl-diphenyl, A., 348.
- Jezowska, B., reduction of per-rhenic acid, A., 310.
- Jha, J. B. See Prasad, C.
- Jilek, A., and Vřešťál, J., determination of antimony in alloys, by means of permanganate, B., 808.
- Jimbo, S. See Kita, G.
- Jimbo, T. See Yoshii, Y.
- Jirak, Leopold. See Janke, A.
- Jirak, L. W., hydraulic filter-pressing of saturation precipitates [in sugar juices], B., 39. Control of washing-out process in potato-starch manufacture, B., 519, 694. Determination of egg volume, B., 875.
- Jirkovský, R., physico-chemical investigation of a new basic ferric ammonium sulphate, A., 51. Application of a drop reaction to determination of traces of silver in galenites and in Příbram flotation concentrates, A., 1093.
- Jirousek, J. F., and Mir-A-Col, Inc., printing ink, (P.), B., 110.
- Jirovec, O., and Vácha, K., photodynamic phenomena in green and colourless strains of *Euglena gracilis*, A., 419.
- Jirsa, F., electrolysis of aqueous solution of ammonium chloride, A., 942.
- Jitariu, P. See Cosmovici, N. L.
- Joachim, A. W. R., and Kandiah, S., compost manure, B., 602.
- Joachimoglu, G., and Klisiunis, N., water sterilisation by oligo-dynamic action of silver [katadyn process], B., 335.
- Job, L., emitter of the bands near 2482.07 Å. in the mercury spectrum, A., 3.
- Job, P., colour of nickel salts in hydrobromic acid solution; application of the law of mass action in concentrated solution, A., 582.
- Freymann, (Mme.) M., and Freymann, R., absorption spectra of organic and inorganic derivatives of ammonia in the near infra-red, A., 563.
- Jobling, J. W. See Meeker, D. R.
- Jochelson, D. B., colorimetric determination of arsenic, A., 948.
- Jockers, W., acid-milling of mordant-dyed woollens, B., 224.
- Jockusch, H. See Bodenstein, M.
- Jodidi, S. L., distribution of non-protein-nitrogen in the Alaska pea, A., 269. Organic nitrogenous and non-nitrogenous compounds occurring in the Alaska pea. II. Isolation of pyrrolidonecarboxylic acid, tyrosine, and diamino-acids from the non-proteins thereof, A., 1041.
- Jodlbauer, A., influence of neutral salts and sugar on hypertonic hemolysis and formation of acid hæmatin, A., 1143.
- Jørgensen, C. See under Jørgensens Maskinfabr. P. ved C. Jørgensen.
- Jørgensen, H., effect of bromate [on baking quality of wheat flour], B., 1019. Inhibition of enzymic proteolytic activity by oxidising agents; action of potassium bromate and analogous substances on the capacity for baking of wheat meal. I., B., 1115.
- Jørgensens Maskinfabrik P. ved C. Jørgensen, crushing and grinding machine, (P.), B., 929.
- Jörgl, J. See Pirsch, J.
- Jöten, K. W. See Sartorius, F.
- Jofa, Z. A., electrolytic solution of lead by the double diaphragm counterflow method, B., 808. Preparation of crystalline litharge in aqueous media, B., 808.
- Brutzkus, E. B., and Vengerova, V. J., electrochemical purification of phosphoric acid, B., 1042.

- Joffé, A., and Joffé, A. F., photo-c.m.f. in cuprite crystals, A., 1303.
- Joffé, A. F. See Joffé, A.
- Joffe, D., uric acid metabolism, A., 1273.
- Joffe, E. W., physico-chemical difference in antibodies against *S* and *R* variants of a single bacterial strain, A., 1030.
- and Mudd, S., paradoxical relation between ζ -potential and suspension stability in *S* and *R* variants of intestinal bacteria, A., 1030.
- Joffe, J. A., and Schakina, A. A., effect of water vapour on rate of reactions in glass manufacture, B., 22.
- Joffe, J. S., soil profile studies. VII. The glei process, B., 686.
- Kardos, L. T., and Mattson, S., laws of soil colloidal behaviour. XVII. Magnesium silicate-its base-exchange properties, B., 1107.
- Joffe, P. M. See Rakovski, V. E.
- Jofnova-Goldfein, E. M., and Gurvitz, S. S., determination of small concentrations. IX. Hydrogen cyanide, A., 949.
- Joglekar, M. S. See Thatté, V. N.
- Johannesson, J. See Lau, E.
- Johannsen, F., and Krupp Grusonwerk A.-G., direct production of wrought iron, (P.), B., 413.
- Johannsen, G. See Bondy, H.
- Johannson, H. See Newton, M.
- Johannson, O. K., and Thorvaldson, T., thermochemistry of compounds occurring in the system $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2$. V. Heats of formation of tricalcium silicate and dicalcium silicate, A., 36.
- Johansson, D., testing methods for evaluation of unbleached chemical pulp, B., 1088.
- Johansson, E. H. E., soldering and metallising of metals [iron and aluminium], (P.), B., 157.
- Johansson, I., variation in milk yield and fat content of milk of cows at pasture and on changing from stall feeding to pasture, B., 699.
- Johansson, K. A., and Wallström, J. A., preservation of meat, pork, fish, etc., (P.), B., 876.
- Johlin, J. M., osmotic relationship in the hen's egg as determined by relative vapour pressures, A., 771.
- John, H., derivatives [esters] of 2-phenylquinoline-4-carboxylic acids, (P.), B., 974.
- and Beetz, P., carvacrol. III. IV. Acyl-methylisopropylphenols, A., 1232, 1369.
- and Pietsch, E., quinoline derivatives. XLVI. Synthesis of 2-cyclohexylquinoline-4-carboxylic acid. LXVII. 2'- and 3'-Amino-2-phenylquinoline, A., 1251.
- John, R., air activators, (P.), B., 731.
- Ozonising element, (P.), B., 731.
- John, W. E., and Beyers, E., treatment of gold-bearing material [containing pyrrhotite], (P.), B., 556.
- See also Dowsett, C. W.
- John Bull Rubber Co., Ltd. See Woodcock, W. J.
- Johns, C. K., evaluation of germicidal potency of chlorine compounds. II. Chloramine-T products, B., 255.
- Johns-Manville Corporation, and Cannon, P. D., [rubber-asbestos yarn] friction material or article, (P.), B., 1078.
- See also Elliott, R. D., Holcomb, H. E., Powell, E. R., Rembert, E. W., Seigle, W. R., and Toohey, E. A.
- Johnson, A. E. See Tapsell, H. J.
- Johnson, A. H. See Conn, L. W.
- Johnson, A. J., [domestic] furnace design for anthracite, B., 932.
- See also Du Pont de Nemours & Co., E. I.
- Johnson, B. K., ultra-violet microscope for examination of opaque objects, A., 188.
- Johnson, C. H., and Bryant, S. A., so-called diaquobisethylenediaminocupric ion; reinvestigation of its simple salts and alleged optical isomerism, A., 49.
- Johnson, C. L. See Glidden Co.
- Johnson, C. M., determination of soluble and insoluble nitrogen in ferrochromium and in corrosion- and heat-resisting steels, B., 64.
- Determination of corrosion-resistance of chromium and chromium-nickel steels, B., 1048.
- Johnson, C. R., atomic mass of potassium. II. Potassium chloride-silver ratio, A., 1048.
- Hydrolysis of alkali chlorides, A., 1087.
- and Hulett, G. A., specific conductance of dilute solutions at 0° and 25°, A., 449.
- Johnson, D. See Ferrin, E. F.
- Johnson, E. A., and Harris, L., thermoelectric force of thin films, A., 154.
- Johnson, E. J., and Canadian Industries, Ltd., shot-shell, (P.), B., 704.
- Johnson, E. L. See Kelly, M. W.
- Johnson, E. R., and Buechling, W. J., banding in a chromium-molybdenum steel, B., 190.
- Johnson, F. B. See Hill, Hinson.
- Johnson, F. H., micro-method for determining utilisation of carbohydrates and polyhydric alcohols by micro-organisms, A., 1170.
- Johnson, F. W. See Du Pont de Nemours & Co., E. I.
- Johnson, G. H., and Atwood Vacuum Machine Co., tumbling mill, (P.), B., 481.
- See also Hillman, A. G.
- Johnson, H. W., injury to forage legumes by the potato-leaf hopper, A., 269.
- Johnson, J., and Hitzrot, L. H., cesium tetraiodophenolphthalein, a new salt for gall-bladder visualisation, A., 1264.
- Johnson, J. A. See Service (Engineers), Ltd.
- Johnson, J. B. See Selle, W. A.
- Johnson, J. B. E. See Garbinton, Ltd.
- Johnson, J. H. See Sarver, L. A.
- Johnson, M. C., models of superposition and interpenetration of components in gas mixtures adsorbed on thermionic, photo-electric, and catalytic surfaces. I. Principles, A., 442.
- and Vick, F. A., cathode-ray oscillography of gas adsorption phenomena. I. Method for measuring high-velocity approach to certain physical and chemical equilibria. II. Duration of an adsorbed state of oxygen on tungsten, A., 1316.
- Johnson, Nils G., influence of chemical combination on $K_{\alpha,2}$ doublet of silicon, A., 908.
- Johnson, Norman G. See Du Pont de Nemours & Co., E. I.
- Johnson, N. J. See Kahlenberg, L.
- Johnson, N. K. See Stone, J. F. S.
- Johnson, O., rapid method for making standard solutions of specified normality, A., 315.
- See also Alty, T.
- Johnson, R., and Fuson, R. C., haloform reaction. XVI. Action of hypiodite on hindered ketones, A., 979.
- Johnson, R. E., Meiklejohn, A. P., Passmore, R., and Thompson, R. H. S., level of carbonyl compounds in human blood, A., 1518.
- See also Thompson, R. H. S.
- Johnson, R. I. See Crosse & Blackwell, Ltd.
- Johnson, R. N., use of plaster of Paris in dentistry, B., 631.
- Johnson, T. See Hägglund, E., and Newton, M.
- Johnson, T. B., and Litzinger, (Miss) A., pyrimidines. CXLVI. Synthesis of uracyl-5-methylamine, A., 991.
- and Moore, M. L., molecular rearrangements of anilinothiols, A., 1120.
- and Sharp & Dohme, Inc., phenolic derivatives of diaryl sulphides [germicides], (P.), B., 841.
- and Winthrop Chem. Co., Inc., thiazole compounds [medicinals], (P.), B., 749.
- See also Buerger, L. R., and Moore, M. L.
- Johnson, T. H., progress of the directional survey of cosmic-ray intensities and its application to analysis of primary cosmic radiation, A., 1297.
- See also Stevenson, E. C.
- Johnson, W. C., Foster, L. S., and Kraus, C. A., extraction of germanium and gallium from germanite. I. Removal of germanium by distillation of germanous sulphide. II. Acid extraction of germanium, A., 1470.
- and Ridgely, G. H., nitrogen compounds of germanium. V. Germanous nitride, A., 51.
- Johnson, W. W. See Ekeley, J. B., and Novotny, E. E.
- Johnson & Co., A. See Kalling, B. M. S.
- Johnson & Co., Ltd., S. H. See Davis, H. H., and Hooton, A. J. S.
- Johnson & Johnson, antiseptic isinglass plaster, (P.), B., 973.
- Proof-coated fabrics [adhesive tape], (P.), B., 1140.
- Johnson-Losee Corporation. See Kleinicke, W.
- Johnson, Matthey & Co., Ltd. See Turner, H.
- Johnstin, R., and Potter, K. S., galacturonic acid as a precursor of ascorbic acid, A., 1175.
- Johnston, A., and North Brit. Rubber Co., vulcanisation of rubber goods and treatment of other goods requiring heat and pressure, (P.), B., 776.
- Johnston, A. (Bristol), metals in food industry, B., 459.
- Johnston, A. C. See Hercules Powder Co.
- Johnston, A. L., jun., Northcutt, R. T., and Food Concentrates, Inc., drying of sugars and other hygroscopic material (P.), B., 83.
- See also Northcutt, R. T.
- Johnston, C. G. See De Beer, E. J.
- Johnston, D. W., and Flintkote Co., road-building composition, (P.), B., 1045.
- Johnston, E. S., phototropic sensitivity in relation to wave-length, A., 548.
- Johnston, H. L., preparation of deuterium-free water; deuterium content of ordinary water, and the at. wt. of hydrogen; electrolytic separation of the oxygen isotopes, A., 590.
- and Dawson, D. H., spectrum of O^{16}H^2 , A., 144.
- and Walker, M. K., heat capacity curves of the simpler gases. VII. High-temperature heat capacities of oxygen and influence of the Δ level on thermodynamic properties of the gas, A., 690.

- Johnston, H. L. See also Hall, W. H., and Knauss, H. P.
- Johnston, H. W., and Maass, O., consumption of energy in grinding mechanical wood pulp, B., 1088.
- See also Holland, W. W.
- Johnston, J., corrosion problems, B., 104.
- Johnston, J. A., carbohydrate metabolism. II. Role of the thyroid gland, A., 888.
- Johnston, M. M., and Kaake, M. J., bacteria on fresh fruit, A., 1281.
- Johnston, N. See Dillon, J. H.
- Johnston, R. G., directionality in annealed alloys, B., 361.
- Johnston, Robert G., and Read, J., carvone series. III. Carvomenthols, *l*-isocarvomenthone, and *l*-isocarvomenthylamine, A., 1245.
- Johnston, S. M. See Hayman, J. M., jun.
- Johnston, W. H., dehulling of barley kernels with sulphuric acid and inheritance of reaction to covered smut, *Ustilago hordei* (Pers.), K. and S.; infection in crosses between Glabron and Trebi barleys, B., 118.
- Johnston, W. R., and Józsa, S., determination of concentration of enzyme preparations, A., 782.
- Redfern, S., and Miller, G. E., determination of invertase activity, A., 659.
- See also Józsa, S.
- Johnstone, H. F., recovery of sulphur dioxide from waste gases; equilibrium partial vapour pressures over solutions of the ammonia-sulphur dioxide-water system, B., 628.
- and Keyes, D. B., recovery of sulphur dioxide from waste gases; distillation of a three-component system ammonia-sulphur dioxide-water, B., 724.
- and Leppla, P. W., solubility of sulphur dioxide at low partial pressures; ionisation constant and heat of ionisation of sulphurous acid, A., 25.
- Johnstone, P. N. See Glasen, A. C.
- Johnstone, W. See Komarewsky, W.
- Johswich, F. See Terres, E.
- Jolibois, P., chemical equilibria in low-pressure gas discharges in the neighbourhood of the cathode and in the positive column, A., 446. Diffusion pump, A., 600. New electrolytic experiment, A., 831.
- and Olmer, F., [cathodic catalysis in the electrical discharge] application to ammonia, A., 1087.
- Joliot, (Mme.). See under Curie, (Mme.) I.
- Joliot, F., and Curie, (Mme.) I., neutrons and positrons; artificial radioactivity, A., 276. New radioactive elements; chemical proofs of transmutations, A., 276.
- and Kowarski, L., production of radiation of energy comparable with that of soft cosmic rays, A., 559.
- Jolivet, H. See Portevin, A.
- Jolles, Z. E., and Camiglieri, W., decomposition of normal diazotates, A., 78.
- Jolley, L. J., thermal oxidation of methylamine, A., 172.
- See also Emeléus, H. J.
- Jolliffe, F., greenalite, A., 954.
- Joly, J. See Mouriquand, G.
- Jónás, G., iodide determination in acid solution, A., 836.
- Jónás, V., effect of the thyrotropic hormone on carbohydrate metabolism, A., 1032.
- Jones, A., ships' paints and compositions, B., 319.
- Jones, A. C., and Lebanon Steel Foundry, high-silicon and high-manganese steel, (P.), B., 106.
- Jones, B., nitrogen-hardening of steels. III. Nitriding of steels containing a low content of chromium and aluminium at various temperatures, including results obtained by two-stage nitriding. IV. Nitriding of high-chromium and austenitic steels at various temperatures, B., 550.
- Jones, C. L., Small, J. D., and Amer. Dryce Corp., solid carbon dioxide product, (P.), B., 306.
- Jones, C. M., and Fish, J. W., plasma-fat acids after adrenaline injection in normal subjects and in patients with liver disease: prognostic significance, A., 1402.
- Jones, D. B., human requirements for vitamins, A., 1427.
- Jones, D. C. See Carter, E. G.
- Jones, D. C. R., and Mason, F. A., synthesis and properties of 2:7-tetramethyldiaminoanthraquinone, 2:7-tetramethyldiamino-10-hydroxy-10-phenylanthrone, and related compounds, A., 87.
- Jones, D. G., refining of a cracked motor spirit, B., 934.
- Jones, D. T. See Burns, R., and Imperial Chem. Industries.
- Jones, D. W. O. See Du Pont de Nemours & Co., E. I.
- Jones, E. E., effect of diet on course of experimental coccidiosis in chickens, A., 236.
- Jones, E. G., and Soper, F. G., nature of the ceric sulphates, A., 934.
- Jones, E. J., and Hendricks, S. B., sources of positive ions; thermionic properties of the system $\text{Li}_2\text{O}-\text{Al}_2\text{O}_3-\text{SiO}_2$, A., 140.
- Jones, E. R., blood-sugar and blood-urea in trypanosomiasis, A., 1403.
- Jones, E. R. (Bangor). See Bradfield, A. E.
- Jones, E. W., analysis of chloride in *Chlophora*, A., 1551.
- Jones, F. A. See Dunlop Rubber Co., and Twiss, D. P.
- Jones, F. G., and Lilly & Co., E., preparation of lysed bacterial proteins for topical application, (P.), B., 46.
- Jones, F. L., energy of agitation of positive ions in argon, A., 274.
- Jones, F. S., and Orcutt, M., prozone phenomenon in specific bacterial agglutination, A., 1169.
- Jones, F. W., treatment of dough and other plastic compositions, (P.), B., 1116.
- Jones, Frank W., drying sewage sludge on vacuum filters, B., 656.
- Jones, Frederick Wilson, and Spooner, W., absorption of light by gaseous chlorine in the region 5040–5320 Å., A., 805.
- Jones, G., and Christian, S. M., measurement of conductance of electrolytes. VI. Galvanic polarisation by alternating current. VII. Platinisation, A., 449.
- and Ray, W. A., surface tension of solutions, A., 819.
- Jones, G. C., seasonal variation of non-fatty solids of milk, B., 250.
- Jones, G. D. O. See Holland, W. W.
- Jones, G. F., printing ink, B., 960.
- Jones, G. W., testing [explosibility] of gases, (P.), B., 758.
- Yant, W. P., Miller, W. E., and Kennedy, R. E., limits of inflammability of diethyl ether and ethylene in air and oxygen, A., 1206. Ignition temperatures of diethyl ether and ethylene in air and oxygen, A., 1327.
- Jones, H. See Clayton, H.
- Jones, H. (Bristol), Bloch theory applied to study of alloys and of properties of bismuth, A., 153.
- Jones, H. A., Campbell, F. L., and Sullivan, W. N., relations between chemical composition and insecticidal efficiency of rotenone-bearing plants, B., 1013.
- Jones, H. C., iron ore deposits of Bihar and Orissa, A., 602.
- Jones, H. G., length variation of nickel on quenching, B., 1049.
- Rowland, G. E., and Williams, A., lead jointing of metals, A., 952.
- Jones, H. I. See Alton, W. H.
- Jones, H. R., galvanometer suspension, A., 599.
- Jones, I., and Soper, F. G., ionisation constants of tartaric acids and nature of borotartaric acids, A., 34. Transmission of polar effects of through space, A., 702.
- Jones, I. II. See Koppers Co. of Delaware.
- Jones, I. R., effect of feeding rations varying in their mineral, vitamin, and protein contents on growth, reproduction, and lactation of dairy cattle, A., 114.
- Brandt, P. M., and Haag, J. R., lucerne hay for milk production, B., 605.
- See also Haag, J. R.
- Jones, J. B., commercial yield of pulp from wood in manufacture of sulphite, B., 399.
- Jones, J. II., possible inter-relationship between physiological actions of the parathyroid glands and vitamin-D, A., 1423.
- Jones, J. W., and Taylor, J. W., effect of parboiling rough rice on milling quality, B., 825.
- Jones, Josiah W., metallurgical control of forging practice, B., 359.
- Jones, K. K., and Laing, G. H., effect of viosterol on calcium content of dog's bile, A., 793.
- Jones, L. A. See Eastman Kodak Co.
- Jones, L. D., and Sharples Specialty Co., mineral oil separation, (P.), B., 11. Centrifugal machine, (P.), B., 532.
- See also Sharples Specialty Co.
- Jones, L. H., eradication of nematodes in greenhouse soils by use of chemicals, B., 422.
- Jones, L. I., reaction of sheep (live-weight increase) to different species and strains of grasses and clovers: yield and other characteristics of species, B., 117.
- Jones, L. R., plastic products [from vegetable waste], (P.), B., 321.
- Jones, L. T. See Union Carbide & Carbon Research Labs.
- Jones, Loren T., and Bates, J. R., reactions involving free alkyl groups. I. Photo-reaction of methane, chlorine, and oxygen. II. Photo-oxidation of gaseous ethyl iodide, A., 48.
- Jones, L. W., Major, R. T., and Merck & Co., Inc., preparation of acetylcholine salts and dimethylamino-ethyl acetate, (P.), B., 287.
- Jones, M., organic accelerators [of vulcanisation of rubber] and problems connected with their use in the factory, B., 962.
- See also Imperial Chem. Industries.
- Jones, M. R. See Larsen, N. P.

- Jones, M. S., and Tod, H., inhibitory action of eserine on choline-esterase *in vivo*, A., 1274.
- Jones, O. J., and Buller, E. L., new uses for anthracite coal and slate, B., 932.
- Jones, P. L. F., structure of the benzene molecule and some of its methyl derivatives, A., 1061.
- Jones, R., building, paving, or other constructional elements, (P.), B., 769.
- Jones, R. D. See Finch, G. B.
- Jones, R. H., and Carter Coal Co., coal-testing apparatus, (P.), B., 8.
- Jones, R. M., toxicity of carbon dioxide-methyl formate mixtures to the confused flour beetle (*Tribolium confusum*, Duv.), B., 1013.
- See also Barrett Co., and MacIntire, W. H.
- Jones, R. N. See Heilbron, J. M.
- Jones, R. O., and Maclean, I. S., oxidation of fatty acids *in vitro*, with especial reference to that of β -hydroxybutyric and acetoacetic acids, A., 1106. Oxidation of phenyl derivatives of fatty acids with hydrogen peroxide in presence of copper, A., 1121.
- Jones, R. T., jun. See Brogdon, J. S.
- Jones, T. E., influence of manuring on yield and botanical composition of lowland pastures: (a) under controlled grazing by sheep, (b) under hay conditions, B., 167.
- Jones, T. S. G., and Davies, W. L., relation of sodium to chlorine in the milk of shorthorn and Guernsey cows, A., 647.
- Jones, V., Spring Hill gold deposit near Helena, Montana, A., 322. Origin of the gypsum deposits near Sandusky, Ohio, A., 1346.
- Jones, W., soft rot of potatoes caused by *Pythium ultimum*, Trow, B., 647.
- Jones, W. A. See Kerr, H. J.
- Jones, W. D., sintering of metal powders, B., 678.
- See also Chalmers, B.
- Jones, W. E. See Imperial Chem. Industries.
- Jones, William E. See Davies, W. H.
- Jones, W. J., Evans, D. P., Gulwell, T., and Griffiths, D. C., physical properties of alkyl compounds of mercury, tin, and lead, A., 333.
- Jones, W. Neilson, organic soils and epinastic response, B., 1061.
- Jones, Webster N., and Goodrich Co., B. F., rubber composition and its manufacture, (P.), B., 241. Rubber composition [containing an anti-ager], (P.), B., 370.
- Jones, W. R., silicosis: the harmful dusts which cause it, B., 832.
- Jones, W. S., Braker, W., and Squibb & Sons, E. R., esters of 2-carboxy-5-aminodiphenyl [anesthetics], (P.), B., 877.
- and Christiansen, W. G., shark-liver oil, B., 640. Preservation of halibut-liver oil with quinol, B., 859.
- Jones & Laughlin Steel Corporation. See Graham, H. W., and St. John, M. W.
- Jonesco, A., structure of ultra-violet absorption bands of acetylene, A., 562.
- Jonesco, M., fruit juices prepared as alcoholic beverages; currant wine, B., 569.
- Jonker, J. L. H. See De Boer, J. H.
- Jonquiere, P. A., prevention of gas explosions in coal mines, B., 835.
- Joos, O. H., improving baking qualities of flour, (P.), B., 1116.
- Joplin, G. A., origin of basic xenoliths in plutonic rocks, with special reference to their grain-size, A., 954. Diorite-limestone reaction at Ben Bullen, New South Wales, A., 954. Exogenous contact-zone at Ben Bullen, New South Wales, A., 1220.
- Jordan, C. W., Ward, A. L., and Fulweiler, W. H., gum deposits in gas-distribution systems; vapour-phase gum, B., 888, 1080.
- See also Ward, A. L.
- Jordan, E. See Cornthwaite, W. R.
- Jordan, E. B., probability of collision for slow H^+ , $(H^+H^1)^+$, $(H^+H^2)^+$, $(H^2H^2)^+$, $(H^2)^+$, and He^+ ions in argon, A., 558.
- Jordan, H., what is known of ferromagnetism with small changes of field? A., 149.
- Jordan, Henry. See Du Pont de Nemours & Co., E. I.
- Jordan, H. H., and Armstrong Cork Co., composition of matter [for gaskets], (P.), B., 111.
- Jordan, H. J., viscosity and plasticity in muscle, A., 109.
- Jordan, H. V., Dawson, P. R., Skinner, J. J., and Hunter, J. H., relation of fertilisers to control of cotton root rot in Texas, B., 118.
- Jordan, L. See Rosenberg, S. J.
- Jordan, L. A., Empire production of tung oil, B., 508.
- and Cutter, J. O., modern views on polymerisation, B., 466.
- See also Cutter, J. O., and Hanstock, R. F.
- Jordan, O., solvents, B., 714.
- Jordan, P., neutrino theory of light, A., 427.
- Jordan, W. R., Randall, L. O., and Bloor, W. R., neuropathy in diabetes mellitus; lipin constituents of the nerves correlated with the clinical data, A., 515.
- Jordt, H., magnesite for preparation of flooring cements, B., 547. Purifying the Elbe, B., 704.
- Jores, A., pituitary hormones, A., 667.
- and Caesar, K. G., action of the melanophore hormone on pigment migration and pupil width of the frog's eye, A., 1422.
- Joret, G., and Malterre, H., soils derived from clay-with-flints in Picardy: comparison with silty soils, B., 740.
- Jorgensen, P. S., and Lynn, E. V., vegetable extracts and blood-sugar, A., 1157.
- Jorgensen, T., jun. See Crawford, F. H.
- Jorissen, W. P., explosion ranges, A., 1081.
- Jorpes, E., pentose polynucleotide of the pancreas, A., 232. Determination of adenine in the presence of guanine, A., 232. Heparin, a chondroitinpolysulphuric acid, A., 646. Chemistry of heparin, A., 1144.
- Joseph, A., and Houdry Process Corp., apparatus for treatment of heavy oils and other similar products with a view to their conversion into lighter products, (P.), B., 56.
- Joseph, E. L., conditioning of mine air with special regard to its purification, B., 926.
- Joseph, L. See Gardner, J. H.
- Joseph, N. R., interaction of amino-acids and salts. I. Zinc chloride. II. Sodium chloride and thallous chloride, A., 1460.
- See also Greenstein, J. P.
- Joseph, (Miss) O. See Mehta, S. M.
- Joseph, T. L., size preparation of iron ores, B., 103.
- and Barrett, E. P., preparation of pure iron by heating briquettes of pure iron ore and reducing agent, B., 103.
- Josephs, H. W., urobilin excretion of infancy and childhood: relation to blood destruction and formation, A., 512. Iron metabolism in infancy; relation to nutritional anaemia, A., 1010.
- See also Shelling, D. H.
- Josephson, B., optical properties of bile acids, A., 976. Determination of cholic acids in blood, A., 1000.
- Josephson, E. M., effect of cortin on intraocular tension in glaucoma, A., 1149. Ascorbic acid in cataract with special reference to dinitrophenol cataracts, A., 1401.
- Joshi, K. C. See Sen, H. D.
- Joshi, N. V., [Imperial] bacteriological report 1932-1933, B., 514.
- Joshi, P. N., and Valladares, J. F., use of magnesium chloride in sizing process of handloom weavers, B., 224.
- Joshi, R. M., are not liquid sodium amalgams colloidal? A., 295.
- Joshi, S. S., and Pannikar, K. P. N., coagulation of colloids. X. Viscosity variation during mutual coagulations of positive ferric oxide sol and colloid arsenious sulphide, manganese dioxide, and antimony sulphide, A., 164. Anomalous variations of viscosity during coagulation of positive ferric oxide sol by colloidal arsenious sulphide sol, A., 1074.
- and Phansalker, G. R., kinetics of sucrose inversion by adiabatic temperature measurements, A., 173.
- and Sharma, K. K., decomposition of sulphur dioxide by electric discharge, A., 46.
- Joshua, W. P. See Distillers Co., Ltd.
- Joslin, E. P., and Lahey, F. H., diabetes and hyperthyroidism, A., 649.
- Joslyn, M. A., and Branch, G. E. K., kinetics of absorption of oxygen by pyrocatechol, A., 1458.
- and Marsh, G. L., clarification and stabilisation of wines by freezing, B., 76. Preservation of orange juice by canning, B., 78. Browning of orange juice; survey of factors involved, B., 427. Effect of cold and freezing storage on wine composition, B., 603. Wine analysis. I. Comparison of direct and indirect methods of determining alcohol, extract, and total acid in dry wine, B., 744.
- Josse, Z. See Mazurek, S.
- Josserand, A. See Arloing, F.
- Jost, E. L. See Seegal, D.
- Jost, H., anaerobic glycolysis in kidney, A., 251.
- See also Embden, G.
- Jost, W., mechanism of explosions and combustion. I. and II., A., 451, 586. Chemical force in the light of quantum mechanics. II., A., 1305.
- and Linke, R., electrolysis of solid alloys, A., 936.
- and Widmann, A., diffusion of hydrogen and deuterium in palladium. I., A., 1200.
- See also Hellmann, H.
- Joszt, A., and Molinski, S., comparative investigations on caramel and molasses colloids, A., 1485.
- Joubert, P. J. See Bonsma, F. N.

- Joukovsky, E., and Buffle, J., surface waters and deep waters in the canton of Geneva, A., 600.
- Joukovsky, N. See Reding, R.
- Jouravsky, G., Cherczenko, P., and Choubert, G., induced remanent magnetism of eruptive rocks, A., 468.
- Jourdan, F. See Hermann, H.
- Jousé, V. P., mechanism of action of solid electron rectifiers, A., 1218.
- Jowett, M., and Quastel, J. H., fat metabolism. I. Oxidation of butyric, crotonic, and β -hydroxybutyric acids in presence of guinea-pig liver slices. II. Oxidation of normal saturated fatty acids in the presence of liver slices. III. Formation and breakdown of acetoacetic acid in animal tissues, A., 1408.
- Joyce, H., soya-bean extraction, B., 559.
- Joyce, J. R. See Asiatic Petroleum Co.
- Joyet-Lavergne, P., mechanism of intracellular oxido-reduction, A., 109. Factors in cellular multiplication, A., 242. Vitamin-A in animal and plant cells, A., 414.
- Józsa, S., and Johnston, W. R., determination of α -amylase, A., 897. See also Johnston, W. R.
- Jucaitis, P., composition and constitution of alkali aluminates; (are the aluminates hydroxo-compounds?) A., 50.
- Jucci, C., genetics of the silkworm. I. Colour of the cocoon, A., 1146.
- Juchum, D. See Wieland, H.
- Juday, C. See Birge, E. A.
- Judd, D. B., determining whiteness of paper, B., 719. Dependence of reflectance and opacity [of paper] on thickness: relation between contrast ratio and printing opacity, B., 845.
- Jude, A. See Lyon-Caen, L.
- Judenitsch, T. See Maljarov, K. L.
- Judina, V. I. See Maklakov, N. F.
- Jühling, L. See Fischer, F. G.
- Jünger, A., corrosion-resistance of steel to bending and its increase by additions to the corroding solution, B., 550.
- Juettner, B., and Howard, H. C., pyrolysis of coal, B., 884.
- Jüttner, H. See Neumann, B.
- Jugenburg, A., and Schlepakov, B. M., Basedow's disease and cholelithiasis, A., 1148.
- Juhlin, G. A., and Associated Electrical Industries, induction electric furnaces, (P.), B., 957.
- Juillet, A., and Zitti, R., seasonal variation of hydrocyanic acid in *Molinia caerulea*, Moench, A., 265.
- Jukes, E. H. T. See Baker, W.
- Jukes, T. H., electrometric titration of lecithin and cephalin, A., 170. and Schmidt, C. L. A., combination of fatty acids with lysine, arginine, and salmine, A., 966. See also Lepkovsky, S.
- Julian, P. L., and Cole, W., addition to conjugated systems in the anthracene series. II. Behaviour of certain anthranols, A., 1369. and Piki, J., indole series. III. Synthesis of [substances containing the ring-system of] physostigmine. IV. Synthesis of *d*-csererthole. V. Complete synthesis of physostigmine (cserine), A., 635, 765. and Sturgis, B. M., homoamines and homoacids, A., 976.
- Julien, L., neutral and permanent adrenaline solution (1:1000), B., 828.
- Juliusburger, F., Topley, B., and Weiss, J., stability against interchange of the iodine atoms in diphenyliodonium iodide, A., 1328. See also Freundlich, H., and Hughes, E. D.
- Juneja, H. R., Narang, K. S., and Rây, J. N., constitution of vasicine, A., 1387. See also Rây, J. N.
- Jung, A., lead baths for hardening and tempering, B., 551. Hardening [of steel] without distortion, B., 593.
- Jung, F. T., and Greengard H., response, of the isolated gall-bladder to cholecystokin, A., 1171.
- Jung, F. W. See Fieldner, A. C.
- Jung, H., X-ray examination of turquoise and other phosphates, A., 842.
- Jung, Hermann, purification of waste water, (P.), B., 48.
- Jung, J., recrystallisation of diorites and quartzite diorites in the Manson plateau (Puy-de-Dôme) under the influence of granitic contact metamorphism, A., 956.
- Jung, L., and Pierre, M., refractive index of serum during the action of a depressor substance: acetylcholine, A., 780.
- Jung, W. See Wolf, L.
- Jungbluth, H. See Heller, P. A.
- Junge, C. H. See Schwartz, H. A.
- Junge, R. See Bauer, K. H.
- Jungeblut, C. W., and Zwemer, R. L., inactivation of diphtheria toxin *in vivo* and *in vitro* by crystalline vitamin-C (ascorbic acid), A., 1429.
- Jungers, J. C., and Taylor, H. S., decomposition of trideuterammonia on tungsten filaments, A., 710. Mercury-photosensitised polymerisation of acetylene and acetylene- d_2 , A., 943. See also Lind, S. C., and Taylor, H. S.
- Junghans, G., preservation of a solution of belladonna extract and determination of its alkaloid content, B., 653.
- Jungkunz, R. See Pritzker, J.
- Junitzkaja, N. V. See Tananaev, N. A.
- Juracec, L., invertase in the latex of *Euphorbia cyparissias*, L., A., 674.
- Juravlev, A. M. See Portnov, M. A.
- Juravleva, L. P. See Fratkín, R. L.
- Jureček, M., determination of small amounts of organic arsenic compounds in air, A., 101. Microanalytical determination of chlorine and bromine in organic substances, A., 1258.
- Juriev, J. K., and Schenjan, F. F., catalytic hydrogenation of pyrrole homologues, and the dehydrogenation of their tetrahydro-derivatives, A., 627. See also Balandin, A. A., and Zelinski, N. D.
- Jurieva, A. V., influence of different concentrations of chlorides on growth of tomatoes, A., 418.
- Jurist, A. E., and Christiansen, W. G., preparation and properties of 3:3'-bis(azo-*m*-phenylenediamine)- and 3:3'-bis(azo-2:6-diaminopyridine)-4:4'-dihydroxyarsenobenzene, A., 1139.
- Van Winkle, J. R., Christiansen, W. G., physical properties of neocarphenamine powder, B., 174. See also Christiansen, W. G.
- Jurkowski, A., and Siniński, L., testing galenical products by microsublimation, B., 877.
- Jurkowski, S., analysis of water of the Boniface spring at Morszyn, A., 190. Polish liquid paraffin for internal use, B., 828.
- Jurriaanse, T., crystal structure of Au_2Bi , A., 1060.
- Jusatz, H. J., influence of vitamins on catalase content of blood. II, A., 546. and Wenzel, F., supplementary action of vitamin-B and -D and their joint influence on blood chemistry, A., 547. See also Bersin, T.
- Juschakov, V. M., transference of electrons from sodium in rock-salt, A., 566.
- Juschin, V. V., air-surplus coefficient for combustion of gases, B., 979.
- Juschkevitch, N. F., Schultz, V. N., Zborovski, M. E., and Ljubimov, A. L., non-metallic paint pigments, B., 860.
- Shavoronkov, N. M., and Zelvinski, J. D., coefficients of absorption of carbon dioxide by water in towers, B., 1091.
- Juschtschenko, S., control of ammonia oxidation, B., 225.
- Jushakov. See under Juschakov.
- Jusov, G. See Gardner, D.
- Just, F. See Ohle, H.
- Just, J., and Szniołis, A., determination of small quantities of silver in water, A., 719.
- Justheim, C. I., treatment of steel, (P.), B., 106.
- Justi, E., specific heats of technical gases and vapours at higher temperatures, A., 289. Vapour pressure of krypton, A., 1313. and Laue, M. von, phase equilibria of the third kind, A., 155. Thermodynamic equilibria, A., 446.
- Justianos, A., and Pierry, J., determination of quinine in chocolate tablets, B., 428.
- Justice, J. L. See Spencer, H. M.
- Justin-Besançon, L. See Lévy, J., and Villaret, M.
- Justin-Mueller, E., reactions of diazotised *p*-sulphanilic acid and formation of an azoxybenzene, A., 969. Resistance to heat of diazonium compounds and theory of formation of azo-complexes, A., 1119. Aniline-black, its characteristics on nitrogenous fibre, and a new method of formation, B., 94. Printing of non-chlorinated wool, B., 588. Nitrobenzene aniline-black, B., 669.
- Justoni, R. See Quilico, A.
- Juzefovitch, A. See Rodionov, S.
- Juzichin, A. N., determination of water in mixtures of solvents with water, B., 395.

K.

- Kaake, M. J. See Johnston, M. M.
- Kaatz, L., and Richter, H. E., evaluating coals, B., 533. Iron carbonyl, its formation and effect in town's gas, B., 660.
- Kabanova, V. See Stepanov, D.
- Kabasawa, I., micro-determination of morphine in the brain, A., 1156.
- Kabatetschnik, M. I., and Katznelson, M. M., structure of isomeric chloroanabasines, A., 635. Introduction of an amino-group into alkaloids by sodamide and potassiumamide. I. and II. α -Aminoanabasine, A., 635, 764. See also Katznelson, M. M.
- Kable, J. See Kohler, E. P.

- Kablukov, I. A., and Zagvozdin, K. I., vapour pressure of phosphoric acid solutions, A., 694, 1318.
- Kabushiki Kaisha Suzuki Shoten. See Kanao, S.
- Kaczorowski, A. See Wasilewski, L.
- Kaczy, H. See Wachholz, L.
- Kadco Corporation. See Hatch, T. F.
- Kadner, R. See Gorbach, G.
- Kadow, K. J., and Anderson, H. W., value of zinc sulphate as a peach spray ingredient, B., 568.
- Kadowaki, K. See Kita, G.
- Kächele, R. See Wolf, L.
- Kälin. See Thomann, J.
- Källström, E., determination of copper in [pharmaceutical] specialities containing copper and iron, B., 523.
- Kaempfe, G., fish oil-stand oil as substitute for linseed oil-stand oil, B., 1054.
- Kämpfer, A., non-splintering, laminated glass, (P.), B., 1044.
- Käpernick, E. See Röhrig, H.
- Käppler, G. See Bauer, K. H.
- Kärst, O. See Gewecke, F.
- Kärsten, ferro-alloys as additions to special steels, B., 854.
- Kaess, G., growth of moulds on chilled meat under various air conditions, B., 604. Effect of air movement on growth of moulds on chilled meat, B., 698.
- Kaetel, W., biocolorescence of aromatic compounds of benzene series, A., 458.
- Kaffer, H., triphenylene as companion of chrysene in coal tar, A., 1358.
- Kagan, B., and Sukhareva, N., oxidation of rubber by hydrogen peroxide, B., 512.
- Kagan, G. A. See Pogodin, S. A.
- Kagan, G. B. See Kuznetsov, M.
- Kagan, I. L., optimum conditions for producing concentrated [sulphite] cooking acid, B., 671.
- and Lipshitz, E. V., utilisation of limestones in sulphite pulping, B., 221.
- Kagan, M. J., and Lubarski, G. D., intermediate stages of aldehyde oxidation. I. Catalytic action of manganese catalyst in the various stages of the process of acetaldehyde oxidation. II. Kinetics of interaction between peracetic acid and aldehydes, A., 1084.
- Sobolev, I. A., and Lubarski, G. D., successive reactions in heterogenous catalysis. III. Mechanism of formation of acetone from acetaldehyde and water, A., 963.
- See also Morozov, N. M.
- Kagan, (Mme.) S., determination of carbon monoxide by Nicloux's method, A., 53.
- Kagan, S. L., determination of small concentrations. X. Microalkalimetry, A., 949.
- See also Pamfilov, A. V.
- Kaganova, E. M. See Vanscheidt, A. A.
- Kaganova, S. S. See Ismailski, V. A.
- Kaganovskaja, S. N., and Sehlíkova, A. G., effect of potassium and calcium chlorides on respiratory metabolism of nerve, A., 652.
- Kagawa, I. See Atsuki, K.
- Kahane, E., elimination of phosphate ion in systematic qualitative analysis, A., 718. Colour reaction between manganese and formaldoxime, A., 951. Dust in the organism. II. Technique of determination of siliceous particles and particles of carbon in the lung, A., 1396.
- Kahl, L. See Rütgerswerke A.-G.
- Kahl, R., dyeing of "Wollstra," B., 721.
- Kahl, W. See Dzewoński, K.
- Kahlbetzer, H., producer gas generators, (P.), B., 936.
- Kahle, H. See Krutzsch, J.
- Kahlenberg, L., Johnson, N. J., and Downes, A. W., activation of gases by metals, A., 43.
- See also Krause, W.
- Kahlenberg, O. J. See Braman, W. W.
- Kahler, H. L. See Sheen, R. T.
- Kahmen, W. See Hölftje, R.
- Kahn, H., [paints simulating] gold and silver bronzes, B., 561.
- Kahn, J., and Chekoun, L., liberation of ammonia by the brain after natural stimulation, A., 1407.
- Kahn, P., and Mautner-Markof, A. von, prevention and removal of boiler scale, (P.), B., 610.
- Kaho, H., protein of healthy potato tubers, A., 1040.
- Kailan, A., chemical action of penetrating radium radiations. XX. Action on aqueous solutions of glycerol, isobutyl and ethyl alcohols, and benzene, A., 1469.
- Kailich, A. See Schuller, H.
- Kainarski, Z. S., influence of additions on properties of silica bricks, B., 545.
- Kainscop, D. See Distillation à Basse Temp. & Auto-Agglomération des Combustibles.
- Kairiukstis, J., benzene and hydrocarbon therapy, A., 394.
- Kaisehev, R., and Stranski, I. N., theory of linear crystallisation velocity, A., 16.
- See also Stranski, I. N.
- Kaiser, E. W. See Rosenblum, C.
- Kaiser, F., former times in chemistry and related subjects, B., 700.
- Kaiser, Franz. See Weiner, R.
- Kaiser, H. F. See Barrett, C. S.
- Kaiser, K., determination of absorption coefficients of filter-glasses in the ultra-red up to 4.1 μ , B., 674.
- Kaiser, R., structure of the six-membered rings C_6H_6 and C_6Cl_6 , A., 431.
- Kaiser, Rudolf, explosibility of molten ammonium nitrate, A., 460.
- Kaiwa, T., and Wada, M., effect of piqure diabétique on blood-sugar and mean blood-pressure of dogs with the adrenal glands or medullae removed, A., 529.
- See also Wada, M.
- Kajmer, H. See Bodforss, S.
- Kakefuda, H., preparation and chemistry of vitamin-B₁, A., 415.
- Kakesita, H., effect of temperature on cathode-ray interference, A., 919. Structure of liquid and solid mercury studied by cathode-ray diffraction. III. Temperature effect, A., 922.
- Kalabuchov, N. (Moscow), and Levinson, L., effect of low temperature on trypanosomes (*Trypanosoma equiperdum*) in mammals, A., 1419.
- and Rodionov, V., changes in blood of animals according to age. I. Changes in blood of rodents (*Mus musculus*, L., and *Citellus pygmaeus*, Pall) and birds (*Passer montanus*, L., and *Larus nidibundus*, L.) during period of growth, A., 372.
- Kalabuchov, N. (Tomsk), electron transfer from metals to dielectrics, A., 5, 557.
- Kalani, O. Y. See Iljinski, V. P.
- Kalb, G., sanidinites of the Laacher lake region, A., 60. Significance of surface forms for determination of symmetry and habit of crystals, A., 150. Crystal morphology of quartz. IV. Morphology in relation to mineral origin. V. Development of form in β -quartz, A., 812.
- See also Endell, K.
- Kalb, L., and Strupp, E., carbonisation of cellulose-pulp waste lyes, (P.), B., 582.
- Kalckar, F., and Teller, E., theory of catalysis of the ortho-para-transformation by paramagnetic gases, A., 1208.
- Kalebin, M. I. See Sabouroff, N. F.
- Kali-Chemie, A.-G., phosphatic fertilisers, (P.), B., 517.
- Kali-Forschungs-Anstalt G.m.b.H., monocalcium phosphate, (P.), B., 147. Mixed fertilisers, (P.), B., 168. Potassium nitrate from sodium nitrate, (P.), B., 452. Decomposition of nitrosyl chloride, (P.), B., 948.
- Kalia, P. N., spark spectrum of iodine, A., 272.
- Kalif Corporation. See Pike, R. D.
- Kalinovska, E., excitation of atomic lines in molecular absorption in Cd vapour, A., 2.
- Kalinovskaja, N. See Reh binder, P. A.
- Kalisch, E., and Späth, K., surface hardening of steel by oxy-acetylene flame, B., 410.
- Kallab, F., and Spinnler, F., influence of the thioacetyl derivatives of aromatic amines on [photographic] development, B., 879.
- Kallauner, O., and Bürgl, B., heat of hydration of cements, B., 1096.
- and Kuraš, K., Penfield's method for determining fluorine, A., 1091.
- Kalle & Co. Akt.-Ges., [derivatives of] diazo-compounds, (P.), B., 14. [Enzyme] de-sizing [of goods sized with starch], (P.), B., 722. Tanned photographic prints, (P.), B., 1024.
- See also Krieger, W., and Schwalbe, W.
- Kallen, H. See Houdremont, E.
- Kalling, B. M. S., Delwig, C. von, and Johnson & Co., A., reduction of [iron] ore, (P.), B., 906.
- Kallós, P., and Kallós-Deffner, L., effect of ultra-violet light on carbohydrate metabolism, A., 121.
- and Nathan, E., preparation and biological properties of the active principle of tuberculin (β -tuberculin). I. II. Sensitisation tests. III. Allergy and immunity relations in tuberculosis, A., 889.
- and Zoboli, C., preparation and biological properties of the active principle of tuberculin (β -tuberculin). IV. Further sensitisation tests, A., 889.
- Kallós-Deffner, L. See Kallós, P.
- Kalný, J. See Tomiček, O.
- Kalt, O. J. See Witty, G.
- Kaltreider, N. See Hurtado, A.
- Kaltschevski, K. A. See Antonov, I. I.
- Kaltschmitt, H. See Kuhn, R.
- Kalunite Co. See Eichelberger, F., and Fleischer, A.
- Kalushskaja, V. M. See Korol, S. S.
- Kamada, M. See Tamaru, S.
- Kamai, G., stereochemistry of tervalent arsenic. I. II. Preparation of *o*-, *m*-, and *p*-phenylmethylarsinobenzoic acids and their attempted resolution into optically active components, A., 875, 1514. Preparation of asymmetric secondary arylarsinic acids, A., 1514.
- Kamakshi, (Miss). See Burjorjee, H. R.

- Kamata, T. See Nakajima, K.
 Kambara, S. See Tanaka, Yoshio.
 Kambeitz, J. See Briegleb, G.
 Kameda, Y. See Asano, M.
 Kamei, S., drying of solids. IX.—XI., B., 1025.
 Mizuno, S., and Shiomi, S., drying of solids. VI. Relation between velocity of drying and direction of the air stream. VIII. Relation between rate of drying and nature of liquid in kaolin. XII. Drying shrinkage of clay samples. XIII. Surface coefficient and critical water content of clays during drying. XIV. Drying of soaps, B., 209, 227, 1142, 1149.
 and Sedohara, T., drying of solids. VII. Cellulose, B., 221.
 Kamenski, M. V., rapid spherometric method for determining coking properties of coals and their mixtures, B., 1078.
 Kamerling, S. E., and Osterhout, W. J. V., kinetics of penetration. IX. Models of mature cells, A., 42.
 See also Osterhout, W. J. V.
 Kameron, P., biological soil studies in a citrus orchard, B., 918.
 and Klintworth, H., influence of fertilisers on nitrogen and carbon cycles in soils, B., 282.
 Kamesam, S., testing of commercial wood preservatives, B., 548.
 Kameyama, N., life of dry cells, especially in case of discharge through constant resistance, B., 681.
 Ikuo, S., and Makishima, S., electrolytic refining of copper, using complex salts of cuprous chloride. XIII., B., 192.
 and Makishima, S., electrolytic refining of copper, using complex salts of cuprous chloride. XIV.—XVII., B., 413, 459.
 and Tanabe, R., electrolytic refining of copper, using complex salts of cuprous chloride. XII., B., 192.
 Kamiński, B., dielectric potentials of physiologically-active substances, A., 30. Preparation of heavy water, A., 311. Surface potentials of alkaloid solutions, A., 698. Dielectric potentials at the solution-air interface, A., 931.
 and Karczewski, K., adsorption potentials of ions and dipoles, A., 293. Electrostatic potential and flotation phenomena, A., 293. Surface tension and electrical potential, A., 293.
 See Gatty-Kostyal, M.
 Kamiński, L., acetyl derivative of a new anhydride of gentiobiose, A., 330.
 and Lewińska, P., application of Friedel-Crafts method to preparation of bornyltoluene, A., 349.
 and Wierzchowski, P., hydrocarbons of the terpene-aromatic series. II. bornylbenzene, A., 754.
 "Kamig" Oesterreichische Kaolin & Montanindustrie A.-G., removal of iron from water and salt solutions, (P.), B., 832.
 Kamiike, O., thermodynamic data for metallic sulphates. III. Calcium sulphate, A., 583. Active charcoal. IX. Curves of sorption isotherms and their properties. X. Non-reducible sorption equilibrium, hysteresis, drift, and residual sorption. XI. Sorption and capillary condensation; their mechanism, A., 1457.
 Kamiński, E., Kurdjumov, G., and Neumark, W., transformation of β -phase of copper-aluminium alloys, A., 291.
 Kaminsky, J. See Harris, L.
 Kamioka, T. See Fujise, S.
 Kamlet, J., micro-determination of cholesterol in whole blood, serum, and plasma, A., 230.
 Kamlova, M. I. See Uvarova, A. V.
 Kammin, H., simple demonstration of catalysis, A., 1329.
 Kamneva, Z. See Ovechki, E.
 Kamogorova, K. A. See Oparin, A. I.
 Kamp, J. van de, and Mosetting, E., phenanthrene series. VIII. Amino-alcohols derived from 1:2:3:4:5:6:7:8-octahydro-phenanthrene, A., 973.
 Kamp, K., barium and zinc oxides as enamel-forming oxides, B., 674.
 Kampf, H. E. See Miller, F. W.
 Kamski, S., harvesting time for *Nicotiana rustica*, B., 1158.
 Kamtikar, R. R., and Husain, S., percarbonates, A., 1332.
 Kamura, H., magnetic [phosphorus-iron alloys, (P.), B., 235. Magnetic iron alloys, (P.), B., 999.
 Kamzolkin, V. P., and Avdeeva, A. V., titanomagnetite as a catalyst for ammonia synthesis, B., 99.
 Livschitz, V. D., and Koshenova, K. T., reduction of a catalyst for ammonia synthesis, B., 1141.
 Kanagy, J. R., and Harris, M., amino-nitrogen contents of wool and collagen, B., 764.
 See also Bowker, R. C., and Wallace, E. L.
 Kanamaru, K., refractivity of cellulose and its derivatives. III. Influence of adsorbed water on refractivity of cellulose fibres. IV. Refractive indices of cellulose fibres. IV. Refractive indices of cellulose nitrate and cellulose acetate, A., 148.
 Kanao, S., and Kabushiki Kaisha Suzuki Shoten, separation of optically active glutamic acid without racemisation, (P.), B., 840.
 Kanda, E. See Aoyama, S.
 Kandelaky, B., Setaschwili, I., and Tawberidge, I., manganous ethoxide; preparation and hydrolysis, A., 1349.
 Kandiah, S. See Joachim, A. W. R.
 Kane, A. P. See Wisniewsky, M.
 Kane, E. A. See Meigs, E. B.
 Kane, F. See Conway, E. J.
 Kane, J., β -9-anthranyl- β -m-nitrophenylpropionic acid and its derivatives, A., 619.
 See also Vachon, A.
 Kane, T. See Strange, E. H.
 Kaneko, Hideo, colloidal behaviour of sericin. VI. and VII., A., 33, 165.
 and Nakazawa, Y., behaviour of aqueous solutions of domestic cocoons. XVIII. Effects of heating and enzyme on sericin. XIX. Resistance to oxidation of sericin. XX. Resistance of sericin to alkali. XXII. Adsorption of colouring matter by sericin, A., 511, 883, 1398; B., 398, 445.
 and Yamamoto, K., solid components of pupa oil. I., A., 510. Behaviour of aqueous solutions of domestic cocoons. XXI. Isoelectric points of sericin and fibroin, A., 1398.
 Kaneko, Hikosaburo, influence of the spleen on inorganic mineral metabolism, A., 1154.
 Kaneko, S., theory of contact resistance, A., 808. Debye theory of strong electrolytes, A., 823.
 Kanel, E., lactic acid formation by a fungus of the *Rhizopus* species, A., 1166.
 Kanga, D. D. See Bhatt, C. T., and Shah, M. S.
 Kanitkar, U. K. See Dastur, R. H.
 Kanitz, H. R. See Grossfeld, J.
 Kanning, E. W. See Hartman, R. J.
 Kanowaka, S., effect of nicotine on blood-coagulation time in rabbits, A., 881.
 Kantam, (Miss) P. L. See Dey, B. B.
 Kanter, A., influence of administration of yeast on hypervitaminosis-A in young rats, A., 543.
 Kantor, L. A., and Ikheizon, S. M., rag halfstuff from seed-flax straw and from common flax refuse straw, B., 222.
 and Resh, M. P., use of seed-flax pulp in production of fine rag papers, B., 222.
 Kantor, T. See Klemenc, A.
 Kao, Chen Heng, Fang, H. Y., and Sah, P. P. T., azides. III. *p*-Chlorobenzazide as a reagent for the identification of primary and secondary amines. IV. *p*-Chlorobenzazide as a reagent for the identification of phenols, A., 998, 1117.
 See also Chang, M. C., and Sah, P. P. T.
 Kao, Chung Hsi, and Chen, K. H., *p*-homosalicylaldehyde as a reagent for copper, A., 720.
 Yen, J. Y., and Chien, S. L., dehydration of acid amides to nitriles, A., 72.
 Kao, H. C., Adolph, W. H., and Liu, H. C., nutritive value of the protein of cabbage and of sweet potato, A., 1153.
 Kao, T. Y., dimesityl diketones and their derivatives. I. *ae*-Dimesityl-*ae*-pentanedione and its dibromo-derivatives, A., 862.
 and Knng, H. C., cleavage of carbonyl compounds. I. Deoxybenzoin derivatives and phenacylsulphonic acid, A., 1240.
 Kapadia, M. R. See Prasad, M.
 Kapatos, L. See Ferrakis, N.
 Kapeller-Adler, R., and Haas, F., origin of histidine in urine of pregnant women, A., 1525.
 Kapitańczyk, K. See Krause, A.
 Kapitza, P., liquefaction of helium by an adiabatic method, A., 57. Production of low temperatures, (P.), B., 977.
 Kaplan, A., and Chaikov, I. L., liver-lipins in completely depancreatised dogs maintained with insulin, A., 411.
 Kaplan, G. E. See Isgarischev, N. A.
 Kaplan, J., light of the night sky, A., 424. New nitrogen afterglow spectrum, A., 907. Hydrogen in the upper atmosphere, A., 1343.
 Kaplan, M. J. See Mindlin, S. S.
 Kaplan, S. I. See Kireev, V. A.
 Kaplowitz, L. See Greene, C. H.
 Kaplun, E. See Mandelstamm, A.
 Kapp, G., electrical and optical properties of semi-conductors. XI. Photo-electric conduction in natural lead chromate, A., 566.
 Kappelmeyer, C. P. A., oiticica fat [oil] and its fundamental difference from Chinese wood oil, A., 1350. Determining inorganic constituents of driers, varnishes, and paint media, B., 238. Determination of calcium oxide in ochres, umbers, and terra di Sienna, B., 366, 465. Determination of phthalic acid in alkyl resins and other phthalic esters, B., 1151.
 Kappen, H., Beling, R. W., and Strüneck, G. von, manual action of brown coal, B., 1109.
 and Solberg, P., blast-furnace slag [as fertiliser], B., 689.

- Kappler, E., observation of the Brownian movement with the unaided eye, A., 1318.
- Kaptzov, N., growth of an electron stream and calculation of current strength in a gas discharge that is not self-sustaining, A., 425.
- Kapur, P. L., and Verma, M. R., anomalous magnetic rotation of uranyl nitrate, A., 684.
See also Bhatnagar, S. S.
- Kapustin, N. P. See Burkser, E. S.
- Kapustina, V. I. See Filipovitch, L. V.
- Kar, H. A., copper determination by α -benzoinoxime in copper-molybdenum alloy steels, B., 636. Electrolytic determination of titanium, zirconium, or aluminium in chromium steels and alloys, B., 807. Sulphur determination [in steel] by the combustion method, B., 854.
- Kar, K. C., the potential barrier, A., 1298. Emission of fast particles, A., 1442.
- Kar, P. K. See Dhar, N. R.
- Kara-Miehaïlova, E., artificial excitation of nuclear γ -radiation, A., 678.
See also Föyn, E.
- Karandikar, J. V., lines or bands in spectrum of the night sky, A., 676.
- Karantassis, T., and Capatos, L., complex iodides of bivalent germanium, A., 1089.
- Karaoglanov, Z., mechanism of precipitation processes. XVI. BaSO_4 containing KMnO_4 , A., 595.
and Sagortschev, B., mechanism of precipitation processes. XV. Reactions in precipitation of Ba^{++} , Pb^{++} , or SO_4^{--} ions as barium sulphate or lead sulphate. XVII. $\text{Ba}(\text{NO}_3)_2$ and H_2SO_4 , A., 317, 1088. Inductive precipitation and solution processes in which ferric and chromic salts participate, A., 1320.
- Karapurkar, Y. M. See Scheffer, F.
- Karasik, P. I., and Masterkov, T. A., rapid determination of anticorrosive action of oils, B., 63.
- Karasina, A. B. See Oparina, M. P.
- Karassik, V. M., and Chelokhanova, V., sodium nitrite as antidote for hydrogen sulphide poisoning, A., 398.
and Lichatschev, M. M., chemical nature and biological activity of methylphenarsazine dihydroxide and its derivatives, A., 246. Relation between chemical structure and biological activity of diphenylmethylarsine dihydroxide and its derivatives, A., 531.
- Rochkov, V., and Vinogradova, O., preventive rôle of methemoglobin-forming substances (sodium nitrite) in intoxication by fluorides, A., 1021.
- Karavaev, N. M., Bashkirov, A. N., and Karzhev, V. I., coals from the Zorinsko-Buikovski deposit, B., 436.
and Kuruindin, K. S., changes of properties of sapropelite gasoline on keeping, B., 53.
- Rapoport, I. B., and Bashkirov, A. N., composition of gasoline from sapropelite tar, B., 53.
and Vasilieva, Z. A., Kizlovski coal, B., 436.
- Karay, G., 'Sigmond's method [for determining available nutrients in soil], especially the 'Sigmond-Becker determination of potassium, B., 688.
- Karbe, L. See Riesser, O.
- Karczag, L., spectrography of normal and pathological gastric juice, more particularly in pernicious anaemia, A., 774. Spectrographic study of the gastric content in fasting men. II., A., 1005.
and Hanák, M., spectrographic study of gastric content in fasting men. I., A., 1005.
- Kardakova, Z. I. See Gerke, F. K.
- Kardos, L. T. See Joffe, J. S.
- Kardos, V. See Bruckner, V.
- Karelitz, S., and Greenwald, C. K., placental immunity. II. Comparison of maternal circulating blood immunity with that of placental fluid, A., 1395.
Greenwald, C. K., and Klein, A. J., placental immunity. I. Determination of dosage of placental globulin in measles prophylaxis, A., 1395.
- Karetnikov, G. A. See Krestovnikov, A. N.
- Karev, M. W., and Rodionov, S., sensitivity of light counters, A., 139.
- Karges, R. A. See Cornog, J.
- Kargin, V. A., electrochemistry of colloids. II. Electrochemical properties of TiO_2 sols, A., 700.
and Fodiman, E. B., red limit of photoelectric effect in potassium-ether sols, A., 700.
and Klimovitzkaja, H. B., exchange adsorption of ions on colloidal arsenic trisulphide, A., 1069.
and Rabinovitch, A. J., electrochemical properties of colloidal silica, A., 296.
See also Fodiman, E. B., and Rabinovitch, A. J.
- Kariher, D. H. See Pommerenke, W. T.
- Karim, M., and Samuel, R., absorption spectra of sulphite and sulphate ions, A., 280. Theory of co-ordinate linking. V. Absorption spectra of simple salts of the transition elements, A., 427.
See also Rao, C. M. B.
- Karimullah. See Freudenberg, K.
- Kariyone, T., volatile constituents of *Cymbopogon georgii*, Honda, B., 1163.
and Kashiwagi, K., constituents of lesser centaury (*Erythraea centaurium*), A., 1550.
- Karl, A., rare-earths of minerals of Madagascar, A., 468. Zirconium pyrophosphate, A., 833.
- Karlasch, P. V. See Voroshechov, N. N.
- Karlberg, O. See Blix, G.
- Karlik, B., and Rona, E., measuring and finding the range of polonium preparations, A., 275.
- Karll, W., relationships between phosphate solubility and reaction in soils, B., 966.
- Karlson, L. E., determination of small quantities of sulphur dioxide and hydrogen sulphide, A., 948.
- Karlsson, K. J. See Bodforss, S.
- Karlsson, P. H. See Colby, H. S.
- Karmaus, H. J., enamelling cast-iron stoves, B., 630.
- Karmazin, V. O., rate of reduction during magnetising roasting of iron quartzites, B., 25.
- Karnad, R. See Dastur, N. N.
- Karnitzki, V. A., and Golubev, N. A., acid corrosion of technical iron in presence of sulphur dioxide, B., 633. Corrosion of technical iron by acids in presence of sulphur dioxide and hydrogen sulphide, B., 1048.
- Karns, C. B. See Miller, C. A.
- Karns, G. M., and Iodine Educational Bureau, Inc., insecticide and fungicide, (P.), B., 375.
- Karp, L., and Kostkiewicz, B., experimental colloid goitre after injection of folliculin, A., 413.
- Karpatschev, S., and Patzug, V., oxygen overvoltage in electrolysis of liquid mixtures of KNO_3 - NaNO_3 - LiNO_3 , A., 1079.
and Stromberg, A., dependence of internal friction [on composition] of fused KCl - MgCl_2 mixtures, A., 439.
- Stromberg, A., and Poltoratzkaja, O., conductivity and density in the system fused KCl - MgCl_2 , A., 927.
- Karpele, O. See "Elact" Ges. für Elekt. Apparate Ges.m.b.H.
- Karpenko, V. See Conn, L. W.
- Karpinski, M. N. See Kliukvin, N. A.
- Karpov, A. Z. See Beltistova, M. V., and Dolgov, B. N.
- Karpov, B. G., and Fedorova, A. N., analysis of fused platinum, B., 312.
- Krasikov, S. E., and Fedorova, A. N., analysis of refined osmium, B., 312.
- Karpuchin, P. P., Dimarskaja, L. V., and Galberschtadt, L., preparation of chlorohydroxyhydrindene and hydrindene glycol from technical indeno from Donetz crude benzol, B., 714.
- Karraker, P. E., and Bortner, C. E., frenching of tobacco, B., 742.
- Karrer, E., and Goodrich Co., B. F., apparatus for ascertaining plasticity of materials, (P.), B., 1075.
- Karrer, P., [flavins], A., 359. Vitamins: their specific and non-specific action, A., 414, 902.
- Euler, H. von, Malmberg, M., and Schöpp, K., biological action of 7-methyl-9-[d-1'-ribityl]isooalloxazine, A., 1010.
- Euler, H. von, Malmberg, M., Schöpp, K., and Benz, F., growth-promoting action of synthetic d-riboflavin (6:7-dimethyl-9-[d-1-ribityl]isooalloxazine), A., 1286.
- Euler, H. von, and Schöpp, K., flavin from fish-eyes, A., 1145.
- and Fritzsche, H., fluorescence curves of lactoflavin and synthetic flavins, A., 1134. Optical activity of lactoflavin, A., 1521.
- and Itchner, V., configuration of nor-leucine and glucosamine, A., 1228.
- Köbner, T., Salomon, Harry, and Zehender, F., photo-decomposition of flavins, A., 631.
- Loewe, L., and Hübner, H., constitution of astacin, A., 346.
- and Meerwein, H. F., degradation of flavins by light, A., 760, 1510. Modified flavin synthesis, A., 1510.
- and Musante, C., formoins. II., A., 1371. Methylalloxazines, A., 1510.
- Salomon, Harry, Schöpp, K., and Benz, F., synthesis of flavins, A., 993, 1510.
- Salomon, Harry, Schöpp, K., Benz, F., and Becker, B., syntheses of flavins. VI. Synthesis of three further stereoisomeres of lactoflavin, A., 1134.
- Schlittler, E., Pfahler, K., and Benz, F., syntheses of substances resembling lactoflavin. II., A., 94.
- and Schöpp, K., ovoflavin e, A., 95.
- Schöpp, K., and Benz, F., synthesis of flavins. IV., A., 631.
- Schöpp, K., Benz, F., and Pfahler, K., syntheses of flavins, A., 359. Syntheses of flavins. III., A., 359.

- Karrer, P., and Segesser, A. von, formoins, A., 623.
and Solmssen, U., plant pigments. LXIII. Products of oxidation of carotenes; carotenoid of *Thiocystis* bacteria, A., 340. Transformation of rhodoxanthin into zeaxanthin, A., 754. Occurrence of carotenoids in marine animals, A., 1145.
See also Euler, H. von., and Theorell, H.
Karrer, W., new flavone dye, A., 91.
and Venkataraman, K., identity of calycopterin and thapsin, A., 1040.
Karreth, A., [cellulose- and hemicellulose-splitting] enzymes, (P.), B., 696.
Karrick, L. C., gas, oil, and other products, (P.), B., 213. Destructive distillation of solid carbonaceous material, (P.), B., 342.
and Ellerbeck, W. L., calcination of gypsum, (P.), B., 1092.
Karschulin, M., periodic changes of potential of iron in nitric acid. I. and II., A., 706, 1325.
Karshan, M. See Rosebury, T.
Karshavin, V. A., oxidation of nitrogen, A., 592.
and Avdeeva, A. V., reactions of pyrites with steam and sulphur dioxide, B., 268.
Karsjajevskaja, M. P. See Tschernichov, J. A.
Karsten, A., [examination of] vitamins in Wood's light, A., 792. Apparatus for ultra-violet irradiation of oils and fats, B., 1054.
Karsten, E., stand oil problem, B., 237.
Karsten, P., use of sodium pyrophosphate in combination with sodium metaphosphate in determination of lead in drinking water, B., 752.
Karstens, W. K. H. See Haas, P.
Karström, H. See Virtanen, A. I.
Karwat, E., production of oxygen for enrichment of air in blast furnaces, B., 898.
Karzhev, V. I. See Karavaev, N. M., and Rapoport, I. B.
Kasahara, M., and Nosu, S. I., lead content of bones in experimental lead poisoning; influence of age, A., 399.
Kasai, B. See Ozaki, J.
Kasanof, M. M., apparatus for treating [tubular] fabrics, (P.), B., 766.
Kasanski, B. A., and Plate, A. F., 2-methyl-dicyclo-[2:2:2]-octane and its behaviour during dehydrogenating catalysis, A., 1112.
and Rafilzon, I. A., preparation of butadiene from *s*-dimethylethylene, A., 1480.
See also Zelinzki, N. D.
Kasarnovski, J. S. See Kritschewski, I. R.
Kasasky, C., stimulative action of soil on germination of seeds, B., 689.
Kaschaev, A. P., and Sinelsch, V. V., utilisation of ammonia liquor as a source of nitrogen for vegetables, B., 866.
Kaschevnik, L. D., and Eidman, S. A., nitrogen balance and the O:N ratio in experimental scurvy. I., A., 888.
Kaschirin, S. M. See Korscheniowski, G. A.
Kaschpur, A. M. See Palladin, A. V.
Kaschtanov, L. I., reactions of titanium tetrachloride etherates with benzene, A., 616.
See also Kobosev, N. J., and Vasiliev, S. S.
Kaschtanov, P. See Burstein, R.
Kaschtschuk, E. P., preparation of sodium chlorate from sodium hydroxide or bicarbonate without evaporation, B., 1091.
Kasé, T., cementation of zinc into some metals by means of zinc dust. I., B., 191.
Kaseno Products Co., Inc. See Marvin, C. O.
Kasey, J. B., improving precipitation [of gold and silver] on zinc shavings, B., 500.
Kashirin, S. See Piatnitzki, M. P.
Kashiwagi, K. See Kariyone, T.
Kasjan, N. S. See Schukarev, A. H.
Kasline, C. T. See Mellon, M. G.
Kasper, C., mechanism of chromium deposition from the chromic acid bath, B., 857.
See also Blum, W.
Kasper, E., and Slawik, P., rapid determination of lead on lead-coated iron, B., 457.
Kasper, M., nutritive value of proteinaceous foodstuffs, A., 652.
Kasprzik, B., ensilage of grass and lupins containing horse-tail, with special reference to the behaviour of the lupin alkaloids, B., 971.
Kassel, L. S., thermodynamic functions of tetramethylmethane, A., 437. Role of methyl and methylene radicals in decomposition of methane, A., 827. Moles of vibration of butane and pentane; "free rotation" about carbon-carbon linkings and a new type of stereoisomerism, A., 917. Statistical mechanical treatment of the activated complex in chemical reactions, A., 1206.
and Guy, T. W., determination of the correct weight of sample in coal sampling, B., 483.
and Storch, H. H., chemical kinetics of reaction of oxygen with hydrogen and with deuterium, A., 709.
Kassiyani, N. S. See Budnikov, P. P.
Kassowitz, H. See Hermann, S.
Kast, H. A. See Amer. Cyanamid Co.
Kastl, O., is thrombin a calcium compound? A., 231.
Kastorskaja, T. L. See Vasiliev, S. S.
Kastrubin, M. See Kiesel, A.
Katadyn-A.-G., effecting a corresponding improvement in condition of alcoholic liquids to that normally obtained by ageing, (P.), B., 696. [Portable] apparatus for oligodynamic treatment of liquids, (P.), B., 774. Clarifying and preserving [fruit juices and alcoholic] liquids containing colloids, (P.), B., 876. Sterilisation of liquids, (P.), B., 880.
Katalimov, M. W., manuring of newly cultivated soils. XII. U.S.S.R., B., 515.
See also Chalisev, A. A.
Katalinić, M., anomalous electrolysis of water, A., 310.
Kataoka, K., Waki, M., and Irie, T., iron stains on dyed wool, B., 897.
Katarian, T. G. See Antonov, L. I.
Kater, J. McA., sodium amyral for anaesthesia in mitochondria, A., 1410.
Kates, W. A. See Corning Glass Works.
Katkova, K. I. See Goldstein, B.
Kato, A. See Yamamoto, R.
Kato, Haruji, utilisation of bagasse. II. Drying of bagasse board. III. and IV. Physical properties of Celotex. II., B., 95, 221, 540.
Kato, Haruo. See Inoue, Y.
Katō, Hisaji, induced precipitation in analysis. I., A., 719. Quantitative separation of metals by hydrogen sulphide. VII. Separation of zinc from chromium and a new method of separating chromium from nickel, cobalt, and iron. VIII. Separation of aluminium from iron, nickel, and cobalt, A., 719, 1474.
Kato, Katsutaka, behaviour of blood-cholesterol following injections of tuberculin, A., 408.
Katō, Kiyotoki, digestion of carbohydrates in mulberry leaves by silk-worms. II. Digestion in different stages of growth, A., 523.
Kato, Koji, silica bricks for coke ovens, B., 949.
Katō, M., adrenaline-sensitising action of alanine, A., 1172.
and Aihara, S., effect of sympathol and adrenalone on action of adrenaline, A., 1173.
Kato, S., and Someno, F., absorption spectra of tervalent halides dissolved in ether and their dissociation products, A., 1444.
Katō, Yōgorō, and Koidzumi, K., [production and use of] lead peroxide anodes, B., 681.
Sugino, K., and Koidzumi, K., calcium cyanamide. III. Preparation of nitroguanidine nitrate, A., 332.
See also Mitsubishi Denki Kabushiki Kaisha.
Kato, Yosiaki. See Yamamoto, R.
Katoh, H., Perkin reaction. III. Condensation of acid chlorides with benzaldehyde, A., 1497.
Katori, S. See Uno, D.
Katrovski, G., influence of p_H of the solution on firmness of unhaired hides, B., 70.
Katsch, G., Baltzer, F., and Brinek, J., inorganic constituents of gastric juice and their relationships to each other, A., 378.
Katschanova, E. E. See Horovitz-Vlassova, L. M.
Katsura, S. See Kuriyagawa, T.
Katsurai, T., influence of temperature, especially above 100°, on inorganic colloids, A., 820.
Katti, M. S. See Ramdas, L. A.
Kattwinkel, R., press for [coal samples with] high caking indices, B., 755.
Katunski, V. M., growth-promoting substance as a factor in formation of plant organisms, A., 795.
Katusev, J. M., Gruba, A. F., and Trekhin, I. P., anti-halation layers and their effect on sensitometric properties of photographic materials, B., 525.
Katz, A. M. See Golova, O. P.
Katz, B., seasonal variations of permeability and metabolism of the muscle of the cold-blooded animal (effect of creatine on the frog's muscle), A., 239.
Katz, E., new reagents in petroleum industry; naphthalene as a de-waxing agent, and cresol as a selective solvent, B., 133.
Katz, H. See Kuhn, R.
Katz, J. R. [with Itallie, T. B. van], physical chemistry of starch and bread making. XXII. Comparative study of retrogression of starch pastes from native starches by means of X-ray diagrams, A., 33.

- Katz, J. R. [with Itallie, T. B. van, and Weidinger, A.], physical chemistry of starch and bread making. XXIII. Effect of alcohol concentration on X-ray diagram retrogression of starch pastes containing alcohol (preparation of starch for X-ray examination by dehydration with alcohol), A., 33.
- and Weidinger, A., physical chemistry of starch and bread making. XXIV. Hindering of X-ray diagram retrogression of starch paste and starch solutions by heating, A., 165.
- Katzilambros, L., determination of bilirubin in serum samples containing hemoglobin, by Van den Bergh's method, A., 508.
- Katzman, P. A., and Doisy, E. A., preparation of gonadotropic extracts of urine of pregnancy by tungstic acid precipitation, A., 128.
- Katzman, S. V. See Moor, V. G.
- Katznelson, I. L. See Plotnikov, V. A.
- Katznelson, M. M., and Kabatschnik, M. I., amidations with sodium and potassium amides in the alkaloid series. II. α - and α' -Aminoanabasine. III. Structures of chloroanabasine isomerides. IV. α - and α' -Aminoanabasines; nitration of α' -aminoanabasine, A., 223, 995, 1136. Ester of p -aminobenzoic acid and lupinine, A., 634.
- See also Kabatschnik, M. I.
- Katznelson, S., accelerated tanning of sole leather, B., 916.
- Katzoff, S., X-ray studies of molecular arrangement in liquids, A., 152.
- and Roseman, R., solution of titanic hydroxide in hydrogen peroxide, A., 1073.
- Kauderer, W. See Eichholtz, F.
- Kauffmann, G. See Fellon, L. D.
- Kaufman, G. See Texas Co.
- Kaufman, S., and Richtmyer, F. K., new satellites of the X-ray line $L\beta_2$, A., 1439.
- Kaufmann, A. S., dewatering of fine coal, B., 1078.
- Kaufmann, H., [medicinal] compositions containing sulphur in colloidal distribution, (P.), B., 124.
- Kaufmann, H. P., quinine compound, (P.), B., 974.
- [with Küchler, K.], syntheses of drugs. VIII. [Use of] complex compounds in the synthesis of drugs. I. Calcium theobromide-calcium nitrite, A., 226.
- [with Schultz, P., and Wurl], syntheses of drugs. IX. Benzthiazolecarbamides, A., 226.
- Kaufmann, L., and Nowotna, A., heterogenic growth and chemical composition of the liver in pigeons, A., 778.
- Kauko, Y., activity of hydrogen ions in Veibel's solution at different temperatures, A., 34. Graphical representation of equilibrium relations in the system base-carbon dioxide-water in dilute solutions from the viewpoint of the classical dissociation theory, A., 34. Erroneous conception with regard to carbonate solutions, A., 34. Apparatus for potentiometric determination of atmospheric carbon dioxide, B., 926.
- and Carlberg, J., first dissociation constant of carbonic acid, A., 823. Activity coefficients of HCO_3^- ions, A., 1321.
- Carlberg, J., and Mantere, V., determination of carbon dioxide in air, B., 671.
- Kauko, Y., and Laitinen, L., carbon dioxide sorption by natural snow, A., 600.
- and Mantere, V., sorption by snow, A., 190.
- Kaul, E., determination of grain size of fine organic powders, B., 785.
- Kaul, K. N., and Ahluwalia, G. S., condensation of cotarnine and o -nitrobenzaldehyde, A., 1513.
- Kaumagraph Co. See Lawrence, W. S.
- Kaunitz, H. See Buck, J., and Elias, H.
- Kausch, O., determination of insulin in body-fluids and tissues, A., 411. Assay of insulin preparations, A., 666.
- Kaushal, R. P. See Bedekar, D. N.
- Kaushansky, L. I., etiology of so-called alveolar pyorrhoëa. I. Influence of diet on mineral metabolism, A., 1409.
- Kautsky, H., [chlorophyll fluorescence and assimilation of carbonic acid], A., 1177.
- and Hirsch, A., chlorophyll fluorescence and assimilation of carbonic acid. I. Fluorescence behaviour of green plants. III. Effect of carbonic acid on fluorescence in living leaves. IV. Effect of oxygen on fluorescence in living leaves, A., 263, 794, 1038. Detection of minimal quantities of oxygen by extinction of phosphorescence, A., 595.
- Hirsch, A., and Flesch, W., energy transformations at surfaces. VIII. Importance of metastable conditions for sensitised photo-oxidations, A., 311.
- and Spohn, H., chlorophyll fluorescence and assimilation of carbonic acid. II. Apparatus for comparative measurement of changes of fluorescence of living leaves, A., 263.
- Kautz, K. See Morris, M. J. R.
- Kautz, S. See Staudinger, H.
- Kavalco Products, Inc. See Scott, Winfield.
- Kavanagh, W. P. See McGrea, F. D.
- Kaverin, I. B. See Kobosev, N. I.
- Kawabe, K., biochemistry of carbohydrates. VII. Enzyme hydrolysing glucosamine. VIII. Distribution and renal threshold of glucosamine after injection into animals. X. Fate of glucosamine in the animal body, A., 111.
- Kawada, T., fate of γ -phthalimido- β -hydroxybutyronitrile in animals, A., 1154.
- and Yamasaki, Fujito, urine of phosphorus-poisoned men, A., 1161.
- Kawada, Y., influence of bile acid on excretion of salts in liver-bile. III. Excretion of phosphoric acid by cholic acid with addition of amino-acids or lactic acid, A., 512. Influence of bile acids on urinary ammonia excretion, A., 1158.
- Kawai, Hidekazu, relation between pituitary and products of internal secretions as reflected in reduced glutathione contents of blood, A., 543.
- Kawai, Hiroshi, dilatometric study of copper- and silver-aluminium alloys rich in aluminium, B., 551.
- Kawai, I. See Wada, A.
- Kawai, N. See Takei, Takeshi.
- Kawakami, I., biochemistry of carbohydrates. XIII. Enzymic decomposition of glucosamine, A., 402.
- Kawakami, K., new crystalline derivatives of vitamin-A, A., 543.
- and Yamamoto, I., toxic components of fish liver-oils, A., 233.
- Kawakami, M., equilibrium diagram of aluminium-magnesium system, A., 158.
- Kawamura, F., decomposition of ozone in aqueous solution. III, A., 452.
- Kawashima, R., basaltic soils in Fukuoka Prefecture, A., 1348.
- Kawecki, K. See Hrynakowski, K.
- Kay, F. W. See Hignett, A. J.
- Kay, H. D. See Folley, S. J.
- Kay, L. See Springfield Mills (Radcliffe), Ltd.
- Kay, P. See Hall & Kay, Ltd.
- Kay-Fries Chemicals, Inc. See Nicholl, J.
- Kaya, S., and Sekiya, J., powder diagrams of magnetised nickel crystals, A., 1307.
- Kaye, A. L. See Thompson, M. de K.
- Kaye, J. See Internat. Latex Processes.
- Kaye, W. A. See Furnas, C. C.
- Kayseler, H., Lassek, H., Pügel, W., and Schulz, E. H., influence of conditions of manufacture on the properties, especially the deep-drawing capacity, of steel sheet, B., 62.
- Kayser, C. See Dontcheff, L., and Thiel, A.
- Kayser, F., preparation of pure diastereoisomeric forms of $\alpha\beta$ -diphenyl- n -propyl and -butyl alcohols, A., 340. Variations in creatininuria during experimental fever, A., 395. Determination of lactic acid [of the French Pharmacopoeia], B., 1117.
- and Masius, N., conditions of determination of lactic acidemia and its variations, A., 372. Blood-lactic acid in patients with hepatic diseases, A., 516.
- Kayser, H. G. See Rosin, P.
- Kazakova, M. N. See Kursanov, A. L.
- Kazarjan, L., application of calcium carbide, A., 729.
- Kazarnovskaja, M. A., and Sosnina, A. S., sulphur compounds in Shorsu crude oil, B., 1029.
- Kazatschkov, L. I. See Levin, S. M.
- Keane, J. See Hardiman, J.
- Keane, J. C., Ambler, J. A., and Byall, S., impurities in white sugars. VII. Distribution of impurities in the sugar crystal, B., 603.
- Kear, C. H. See Keatley, C. W.
- Kearby, K. See Kistler, S. S.
- Kearns, H. G. H., control of insect pests of basket willows, B., 822.
- Marsh, R. W., and Martin, Hubert, combined [insecticidal and fungicidal] washes, B., 822.
- Marsh, R. W., and Swarbrick, T., joint control of apple sawfly (*Hoplocampa testudinea*, Klug) and apple scab, B., 247.
- and Walton, C. L., control of chrysanthemum eelworm (*Aphelenchoides ritzema-bosi*, Schwartz), 1931-1933, B., 248.
- See also Hutchinson, H. P.
- Kearton, C. F. See Thompson, Harold W.
- Keatley, C. W., Woody, G. V., Kear, C. H., and Koppers-Rheolaveur Co., dryer, (P.), B., 337.
- Keel, H. See Diels, O.
- Keck, P. H., graininess of photographic emulsions, B., 1166.
- Keck, W. N. See Witschi, E.
- Keding, E., total sterol content of cereals and legumes and method for its determination, A., 1434.
- Kedrov, K. P., antiscorbutic vitamin in horse-radish, A., 1287.
- Keeble, F., and Nelson, M. G., integration of plant behaviour. V. Growth substance and traumatic curvature of the root, A., 548.
- Keefe, R. B. See Woodward, C. B.

- Keefer, C. E.**, sludge dewatering at the Baltimore (Maryland) sewage works, B., 527.
- and **Kratz, H., jun.**, vacuum filtration of elutriated [sewage] sludge, B., 79.
- Keefer, C. S., Myers, W. K., and Holmes, W. F., jun.**, characteristics of synovial fluid in various types of arthritis, A., 381. Inhibition of tryptic digestion of cartilage by synovial fluid from patients with various types of arthritis, A., 885.
- See also **Holmes, W. F., jun.**, and **Myers, W. K.**
- Keelan, R. E.** See **Gen. Electric Co.**
- Keeley, R. J.**, use of charcoal in the non-ferrous foundry, B., 1049.
- Keeley, T. C., Mendelssohn, K., and Moore, J. R.**, superconductors, A., 20.
- Keeling, W. O.**, apparatus for distilling hydrocarbons, (P.), B., 486. Apparatus for pyrolytic processing of hydrocarbons, (P.), B., 1034. Pyrolytic treatment of hydrocarbons and carboniferous material, (P.), B., 1034.
- and **Crown Central Petroleum Corp.**, treatment of lubricating oils, (P.), B., 760.
- Keen, A. W.** See **Madge, N. G.**
- Keen, W. H., and Guttzeit, C. W.**, alloy steel, (P.), B., 907. Corrosion-resisting alloys, (P.), B., 907.
- Keenan, J. A., Kline, O. L., Elvehjem, C. A., and Hart, E. B.**, stability of vitamin-B₁, -B₂, and -B₄, A., 669.
- Keene, W. L., Turner, H. G., and Scott, G. S.**, reactivity of anthracite with carbon dioxide, B., 211.
- Keenol Lubricants, Ltd.** See **Hart, A.**
- Keeser, E.**, thyroid gland, lipase, and catalase, A., 1536.
- and **Keeser, I.**, distribution of barbiturates in the brain, A., 525. Distribution of diethylbarbituric acid in brain, A., 1396.
- Keeser, I.** See **Keeser, E.**
- Keesom, (Miss) A. P.** See **Keesom, W. H.**
- Keesom, W. H.**, thermal behaviour of metals at very low temperatures, A., 156. Disturbance of superconductivity of an alloy by an electric current, A., 201. Thermodynamic temperature scale below 1° abs., A., 1217.
- and **Clark, C. W.**, atomic heat of nickel at liquid helium temperatures, A., 574. Atomic heat of nickel from 1.1° to 19.0° abs., A., 924. Heat capacity of potassium chloride from 2.3° to 17° abs., A., 1063.
- Dijk, H. van, and Haantjes, J.**, separation of neon into its isotopic components by means of rectification, A., 189.
- and **Doborzyński, D. W.**, thermal expansion of Jena thermometer glass 2954^{III}, A., 21.
- and **Haantjes, J.**, vapour pressure of neon at liquid hydrogen temperatures, A., 691.
- and **Keesom, (Miss) A. P.**, specific heat of liquid helium, A., 924.
- and **Kraak, H. H.**, compressibility of helium gas between 2.6° and 4.2° abs., A., 157.
- and **Lammeren, J. A. van**, velocity of sound in neon gas, A., 155.
- and **Matthijs, C. J.**, thermo-electric forces of some alloys at 2.5–17.5° abs., A., 1066.
- Mazur, J., and Meihuizen, J. J.**, vapour pressures of solid krypton, A., 1064.
- Keesom, W. H., and Taconis, K. W.**, X-ray goniometer for the investigation of crystal structures of solidified gases, A., 839.
- See also **Itterbeek, A. van, and Lisman, J. H. C.**
- Keet, G. C. E.**, means for reducing or comminuting and classifying or grading ore and other materials, (P.), B., 386.
- Keeton, R. W., and Bone, D. D.**, diets low in calories containing varying amounts of protein; their effect on loss in weight and on metabolic rate in obese patients, A., 517.
- Keffer, L.**, fractional distillation in a vacuum as a method of purifying fats. I. Application to alkyl oleates, A., 1350.
- and **McLean, J. H.**, homology in long-chain compounds. I. Oleic acid and n-alkyl oleates, A., 1064.
- Keffer, L. J. P.**, source of error in determining heats of combustion of organic substances by means of the bomb calorimeter. III, A., 465. Source of error in thermochemical measurements making use of commercial oxygen, B., 493.
- Keggin, J. F.** See **Illingworth, J. W.**
- Kehar, N. D., and McCollum, E. V.**, bound water in cardiac muscle in relation to ventricular fibrillation, A., 775.
- Kehoe, R. D.**, beating *versus* jordaning in papermaking, B., 764.
- Keig, H. J. B.** See **Linen Industry Res. Assoc.**
- Keil, H. H.** See **Keil, H. L.**
- Keil, H. L., Keil, H. H., and Nelson, V. E.**, effect of addition of minerals and sucrose to milk diet on growth, fertility, and lactation in the rat, A., 114.
- and **Nelson, V. E.**, rôle of copper in haemoglobin regeneration, A., 380. Regeneration of haemoglobin, A., 1391.
- Keil, W., and Bartmann, H.**, occurrence of phenylethylamine in fungi, A., 1433.
- and **Hepp, G.**, increase in local anaesthesia by morphine, A., 1532.
- and **Kritter, B.**, chemistry and pharmacology of fermented foodstuffs, A., 529.
- and **Kunz, E.**, chemistry and pharmacology of fermented foodstuffs. II, A., 125.
- and **Pörtner, F.**, chemistry and pharmacology of fermented foodstuffs. IV, A., 1419.
- and **Rühling, I.**, increase and diminution of the convulsive action of local anaesthetics, A., 1532.
- Keilin, D., and Hartree, E. F.**, inhibitors of catalase reaction, A., 248. Combination between methaemoglobin and peroxides: hydrogen peroxide and ethyl hydroperoxide, A., 372.
- Keilling, J.**, "rouge des tablards" [red discoloration of cheese in store], B., 331.
- See also **Guittonneau, G.**
- Keillor, J.**, carbonising plant, (P.), B., 711.
- Keimatsu, I.** See **Kondo, H., and Suzuki, H.**
- Keir, J. M., and Oxweld Acetylene Co.**, welding rod, (P.), B., 504. Welding [steel], (P.), B., 504.
- Keiser, B.** See **De Groote, M.**
- Keith, N. M., Power, M. H., and Peterson, R. D.**, renal excretion of sucrose, xylose, urea, and inorganic sulphates in normal man, A., 106.
- See also **Osterberg, A. E.**
- Keith, P. C., jun., and Gasoline Products Co.**, cracking of oils in vapour phase, (P.), B., 486. Cracking of heavy [hydrocarbon oil] stocks, (P.), B., 663.
- See also **Gasoline Products Co.**
- Keitt, G. W.**, development of eradicant fungicides, B., 568.
- and **Palmiter, D. H.**, fungicidal properties of copper-lime-arsenite preparations, B., 567.
- Kélaiditis, G.**, separation of Greek strains of *Saccharomyces* from Cyprus and Santorin in over-acid media of tartaric acid in presence of ethyl alcohol and magnesium sulphate, A., 661.
- Kelbovskaja, M. K.** See **Krestinski, V. N.**
- Kelkar, V. N.** See **Ramanathan, K. R.**
- Kell, A. T. B.**, anticoagulation and preservation of liquid rubber latex, (P.), B., 962.
- Kell, S.** See **Traube, W.**
- Kellaway, C. H., and Williams, F. E.**, antigenic differences between venoms of the tiger-snake *Natechis scutatis* and the black tiger-snake *Notechis scutatis*, var. *niger*, A., 883.
- Kelle, W., and Carlsson, F.**, freeing from fat or oil substances containing fat or oil, such as meat, fish, fruits, (P.), B., 959.
- Keller, A. V.** See **Rousset, M. B.**
- Keller, C. H., and Minerals Separation North Amer. Corp.**, furfuryl xanthate, (P.), B., 622.
- Keller, E.** See **Fierz-David, H. E.**
- Keller, F.** See **Aluminium, Ltd.**
- Keller, F. (Dresden)**, current distribution between a small (point) cathode and a large (infinite) anode for glow discharges in different gases, A., 1438.
- Keller, H.**, determining fertiliser requirements [of soils], B., 198. Preparation and rotting of stall manure, B., 324.
- Keller, H. W., and Polk, I. H.**, preserving fruit juices in their natural state, (P.), B., 123.
- Keller, R.**, biologically electronegative nature of potassium, A., 120. Chemical and electrical properties of connective tissue, A., 1012. Hofmeister's series and the grouping of ions, A., 1012.
- Keller, W. D.**, occurrence of mendozite and tamarugite in Missouri, A., 1345.
- Kellermann, H.** See **Fischer, Hans.**
- Kelley, E. G.**, reactions of dyes with cell-substances. III. Apparatus for definition of colour in stained histological sections, A., 1043.
- and **Muller, E. G., jun.**, reactions of dyes with cell-substances. I. Staining of isolated nuclear substances. II. Differential staining of nucleoprotein and mucin by thionine and similar dyes, A., 1043.
- Kelley, F. C.** See **Gen. Electric Co.**
- Kelley, V. C.**, paragenesis of the Colorado copper sulphides, Cananea, Mexico, A., 1478.
- Kelley, V. W.** See **Farrar, M. D.**
- Kelley, W.** See **Belden, D. S.**
- Kelley, W. H., jun.** See **Hazlehurst, T. H., jun.**
- Kelley, W. P.**, agronomic importance of calcium, B., 865.
- Kellie, A. E., and Zilva, S. S.**, catalytic oxidation of ascorbic acid, A., 793.
- Kellner, E., and Bennewitz, K.**, electrolytic development of photographic layers, A., 458.
- See also **Bennewitz, K.**

- Kellogg, C. E., morphology and genesis of solonch soils of western North Dakota, B., 197.
- Kellogg, D. R., electrodeposition of iron for wearing and bearing metal, B., 595.
- Kellogg, J. H., acidophilus milk, (P.), B., 1067.
- Kellogg Co. See Wilder, H. K.
- Kellström, G., viscosity of air and the electronic charge, A., 1455.
and Ray, B. B., emission lines and absorption edges in L series of barium and caesium, A., 424.
- Kelly, F. H. C., determination of chloride with adsorption indicators, A., 1471.
- Kelly, G. A. See Bichowsky, F. R.
- Kelly, M. E. See Kelly, W. H.
- Kelly, M. W., and Johnson, E. L., modification in the confirmatory test for zinc ion, A., 1473.
- Kelly, T. L., and Segura, M., *p*-nitrobenzyl esters of organic acids, A., 81.
- Kelly, W. H., and Kelly, M. E., treating [bearing] metal, (P.), B., 314.
- Kelly, W. R. See Essex, H.
- Kelsall, A., iron sulphate and lime-sulphur mixture as a spray, B., 1111.
and Hockey, J. F., pest and disease control, B., 246.
Pickett, A. D., and Patterson, N. A., control of grey-banded leaf roller, B., 247.
- Kelsall, G. A. See Bozorth, R. M.
- Kelsen Special Sheet Holding Soc. Anon., galvanoplastic or electrotype deposits [e.g., of iron], (P.), B., 909.
- Kelvin, Bottomley & Baird, Ltd. See Digby, W. P.
- Kemble, E. C., intensities of vibration-rotation bands of HCl, A., 806.
and Present, R. D., breakdown of the Coulomb law for the hydrogen atom, A., 144.
- Kemeny, C. See Schmid, L.
- Kemet Laboratories Co., Inc., [alloys for] clean-up agents or getters [for thermionic devices], (P.), B., 810.
See also Cooper, H. S., and Holladay, J. A.
- Kemmer, F. R., and Magnesium Products, Inc., distillation and condensation [purification of magnesium], (P.), B., 29.
Treatment of metal [magnesium] powder, (P.), B., 414.
- Kemmer, H., and Raschig, M., storage of dry gas in wet holders, B., 932.
- Kemmer, N., electromagnetic mass of the Dirac electron, A., 679.
- Kemmerich, W. E., [dry] products for production of diazo-solutions, (P.), B., 717.
- Kemnitz, G., Knoll, M., and Walcher, W., electron grouping by concave glowing cathode surfaces revealed by the electron microscope, A., 1439.
- Kemner, H., preparation and application of Congo-copal esters, B., 1151.
- Kemnitz, E. See Krause, A.
- Kemp, A. R., and Malm, F. S., hard rubber (ebonite), B., 418.
See also Electrical Res. Products.
- Kemp, A. V. See Gas Chambers & Coke Ovens.
- Kemp, I., relation between particle size and cataphoretic mobility, A., 1321.
and Rideal, E. K., cataphoresis of gliadin. I. Adsorption of gliadin on quartz. II. Effect of strong electrolytes on mobility, A., 30. Cataphoresis of colloidal electrolytes, A., 299.
- Kemp, I. See also Chain, E.
- Kemp, L. C., jun., Collins, J. F., jun., and Kuhn, W. E., determination of sp. gr. of gases; improvements in the effusion method, A., 1342.
- Kemp, P., and Feuer, E., finely-divided lead or lead oxide, (P.), B., 235.
- Kemp, T., effect of the pituitary growth-hormone on mice with hereditary dwarf growth, A., 1171.
and Pedersen-Bjergaard, K., absorption and excretion ratios of folliculin in man, A., 259.
- Kempa, H. See Voit, K.
- Kempel, A. B. See Tseng, A. T. K.
- Kemper, H., chemistry of autogenous welding, B., 728.
- Kempf, L. W., occurrence of CuAl_2 in duralumin, B., 65.
See also Aluminum Co. of America.
- Kempf, R., durability of white oil paints on wood, B., 1004.
- Kempton, A. E. See Oliphant, M. L. E.
- Kemula, W., catalysis of acetylene polymerisation in ultra-violet light by mercury vapour, A., 1208.
and Wenigerówna, B., polarographic studies; measurements of "limiting currents" in solutions of pure salts by means of the Kučera-Heyrovský dropping mercury electrode, A., 305.
- Kendall, E. C., apparatus for purification [of mixed] gases, (P.), B., 579.
- Kendall, H. S. See Dow Chem. Co.
- Kendall, J. D., tricarboyanine dyes, (P.), B., 398. Compounds of the cyanine type, (P.), B., 398. Treatment of photosensitive emulsions, (P.), B., 702. Compounds [dyes] containing a methine or polymethine chain, (P.), B., 842. Compounds [dyes] containing a polymethine chain, (P.), B., 842. Production and use of [photosensitising] dyes having a methine or polymethine linkage, (P.), B., 843. Modification of sensitivity of photographic emulsions, (P.), B., 879. Compounds containing an ethylenic linking or a polymethine chain, (P.), B., 894. [Photosensitising] dyes, (P.), B., 942.
- Kendall, M. T. See Texas Co.
- Kendall, N. J. See Beard, P. J.
- Kendall Co. See Reed, R. E.
- Kenez, I. See Vassiliev, I.
- Kenig, D., mineral water of Strumicka Banja, A., 841.
- Kennard, E. H., and Ramberg, E., origin of K α satellites, A., 138. Self-consistent field and some X-ray terms of the sodium atom, A., 138.
- Kennard, M. E. See Chambers, W. H.
- Kennard, T. G., spectrographic examination of smoky and ordinary quartz from Rincon, California, A., 955.
- Kennaway, E. L. See Barry, G.
- Kennedy, A. M., and Motor-Vita Corp., apparatus for analysing gaseous mixtures, (P.), B., 85.
- Kennedy, C. See Nilson, H. W.
- Kennedy, C. C. See Dow Chem. Co., and Henderson, C. T.
- Kennedy, G. F., Bewoid rosin-size process, B., 143.
See also Hercules Powder Co.
- Kennedy, H. E. See Union Carbide & Carbon Research Labs.
- Kennedy, J. E., and Kennedy, N., gyratory crusher, (P.), B., 1026.
- Kennedy, N. See Kennedy, J. E.
- Kennedy, P. W., pulverising and granulating mill, (P.), B., 882.
- Kennedy, R. E. See Jones, G. W.
- Kennedy, R. R., effect of elevated temperatures on strength and dimensional stability of aluminium alloys used in aircraft, B., 997.
- Kennedy, S. J. See Ferguson, A.
- Kennedy, T. R. See Russell, A. S.
- Kennelly, R. G. See Fieser, L. F.
- Kenner, J., Polanyi, M., and Szego, P., aluminium chloride as a catalyst of hydrogen interchange, A., 454.
and Statham, F. S., constitution of apocinchene and synthesis of its methyl and ethyl ethers, A., 766.
See also Adamson, D. W., and Baddeley, G.
- Kennett, J., kilns for burning bricks, etc., (P.), B., 102.
- Kennicott, C. L., [sulphide] ore treatment, (P.), B., 106.
- Kenny, F. J. See Fink, C. G.
- Kent, A., complexes of polynitro-compounds. I. Compounds of polynitrohydrocarbons with 1-keto-1:2:3:4-tetrahydrocarbazole, A., 1132.
- Kent, R. S., dryer, (P.), B., 385.
- Kenworthy, L., atmospheric corrosion and tarnishing of tin, B., 996.
- Kenyon, F., Wilson, C. A., and Macy, J. G., daily fluctuations in urinary p_{H} , A., 380.
- Kenyon, H. F. See Bowden, F. P.
- Kenyon, J., Phillips, H., and Pittman, (Miss) V. P., Walden inversion reactions of *d*- β -butyl, *d*- β -octyl, and *d*- β -benzylmethylcarbonyl *p*-toluenesulphonates, A., 1230.
- Kenyon, R. L., importance of grain size of sheet steel for deep drawing, B., 677.
- Kenyon, W. O. See Eastman Kodak Co.
- Kepes, E. See Glabau, C. A.
- Keppeler, G., and Borchers, H., pressure extraction of bituminous coal, B., 6.
and Pangels, R., swelling of whiteware bodies, B., 22.
and Thomas-Welzow, M., attack of alkali-lime-silica glasses by water, B., 404.
- Keramische Industrie-Bedarfs Akt.-Ges., [contact] device for fixing the heating elements in electric resistance furnaces, (P.), B., 958.
- Kerasin, Ltd., cosmetic salves or basic substances for salves, (P.), B., 288. Mineral oil powders, (P.), B., 832.
- Keresztes, Z., combination of ovalbumin and casein with tyrosine, A., 506.
- Keresztes, J. C. See Buchman, E. R., and Williams, R. R.
- Kerfoot, F. See Birmingham Electric Furnaces.
- Kerk, P. C., electrode for electrolytic baths, (P.), B., 596.
- Kermack, W. O., Muir, W., and Wight, T. W., attempts to find new antimalarials. XIII. Synthesis of ω -substituted derivatives of 8-methylquinoline, A., 1251.
and Wight, T. W., attempts to find new antimalarials. XIV. Derivatives of 8-methylquinoline, A., 1506.
See also Gillieson, A. H. C. P.
- Kern, A., action of potassium hydroxide on colloidal system of skim milk in presence of calcium chloride, of formaldehyde, or of both, B., 781.
- Kern, E. F., and Nat. Lead Co., purification of lead, tin, and lead-tin alloys, (P.), B., 680.

- Kern, H., and Lissner, A., improvement of grey cast iron, B., 358, 633.
- Kern, H. A. See Evans, W.
- Kern, J. G. See Du Pont de Nemours & Co., E. I.
- Kern, L., ceramic product [from ashes], (P.), B., 546. Substitution of benzols and benzines by alcohol [in lacquer diluents], B., 1102.
- Kern, W., highly polymerised compounds. CXIV. Comparison of the osmometrically and viscosimetrically determined mol. wts. of mixtures of polymeric homologues, A., 1219.
- Kernin, A. G., and Mosinee Paper Mills Co., feeding of [paper-mill] black liquor to a smelting furnace, (P.), B., 1041.
- Kerpel-Fronius, E., and Butler, A. M., salt and water losses in diuretic diuresis and their relation to serum-non-protein-nitrogen and -electrolyte concentrations, A., 1158.
- Kerr, H. J., and Babcock & Wilcox, Ltd., mercury boiler, (P.), B., 908.
- Prentice, J., Jones, W. A., and Babcock & Wilcox, Ltd., drum with removable head for vapours under pressure, (P.), B., 85.
- Kerr, H. W., [sugar]-cane ripening and maturity testing, B., 38.
- Kerr, P. F., U-galena and urauinite in Bedford, New York, cyrtolite, A., 954.
- and Jenney, P., dumortierite-andalusite mineralisation at Oreana, Nevada, A., 955.
- See also Grim, R. E., and Ross, C. S.
- Kerr, R., use of sodium sulphite as addition to alkaline detergents for tinned ware, B., 808.
- Kerr, R. S. See Schmitt, F. O.
- Kerr, S. E., phosphorus compounds of brain. I. Phosphocreatine, A., 1265.
- See also Avery, B. F.
- Kerrick, W. B. See Clayton, B.
- Kerridge, P. M. T. See Holiday, E. R.
- Kerschbaum, F. P., Waggaman, W. H., Gooch, S. D., and Pembroke Chem. Corp., recovery of phosphorus from dilute gases, (P.), B., 452.
- Kershaw, A. See Imperial Chem. Industries.
- Kerslake, J. E. See Miller, W. T.
- Kerst, D. W. See Herb, R. G.
- Kerstein, G. See Plawenn, A. von.
- Kersten, H. See Dwight, C. H.
- Kersten, M., elastic modulus of ferromagnetic metals, A., 1062. Mechanical damping of ferromagnetic materials in magnetisation, A., 1063.
- Kertész, Z., perfect and imperfect combustion in furnaces, especially in lime- and cement-roasting plants, B., 707.
- Kertész, Z. I., determination of glycuronic and galacturonic acids by Bertrand's method, A., 328. Water relations of enzymes. I. Influence of viscosity on invertase action. II. Water concentration required for invertase action, A., 533, 1163. Determination of maturity of canned peas, B., 250.
- Horsfall, J. G., and Rouse, A. H., aberrations in chemical composition of peas from plants affected with root-rot, A., 554.
- See also Tottingham, W. E.
- Kesper, J. F., [uses of aluminium-plated aluminium-zinc alloys], B., 678.
- Kessel, W., rôle of absorption of the exciting line in resonance spectra, A., 137.
- Kesseling, R. See Novak, J.
- Kessler, D. W., exterior waterproofing materials for masonry, B., 592.
- Kessler, L. H., and Nichols, M. S., oxygen utilisation by activated [sewage] sludge, B., 1120.
- Kessner, and Everts, T., hardness of sprayed metal films, B., 771.
- Kester, E. B. See Fieldner, A. C.
- Kestner, O., Never, H. E., and Sehestedt, H., blood-sugar curves and the digestive canal, A., 522.
- Keston, A. S., silver-silver bromide electrode suitable for measurements in very dilute solutions, A., 1341.
- Keszler, F. See Spith, E.
- Ketelaar, H. See Stahel, E.
- Ketelaar, J. A. A., modifications of silver mercury iodide, A., 567. Rotational and translational degrees of freedom in the solid state; structure of solids. II, A., 688. Mechanism of transition in ammonium salts at -40° , A., 919. Crystal structure of aluminium halides. II. Crystal structure of $AlCl_3$, A., 920. Concept of "chemical compound," A., 1058.
- Ketterer, S. G., and Schutte & Koerting Co., scrubber, (P.), B., 388.
- Keuning, K. J., and Evenhuis, N., 4-bromo-o-toluic acid, A., 341.
- Keutgen, C. H., purification of edible oils, B., 159.
- Keutner, E. See Malsch, J.
- Key, A., and Etheridge, W., oxidation of gas-works liquors in admixture with sewage, B., 47.
- Key, J. See Ornstein, L. S.
- Key, J. A. See Kisner, P.
- Keyes, D. B. See Gallagher, M., and Johnstone, H. F.
- Keyes, G. H. See Brooker, L. G. S.
- Keys, A. B., carbon dioxide balance between maternal and foetal bloods in goats, A., 229.
- Christensen, E. H., and Krogh, A., organic metabolism of sea-water with special reference to the ultimate food cycle in the sea, A., 1281.
- and Taylor, H., behaviour of plasma-colloids in recovery from brief severe work and permeability of capillaries to protein, A., 879. Determination of colloidal osmotic pressure in blood-serum and similar fluids, A., 879.
- See also Adair, G. S., and Krogh, A.
- Khaikova, N. A. See Solodovnikov, P. A.
- Khalil, F. See Gracie, D. S.
- Khan, A. A., Kurien, P. N., and Pandya, K. C., condensation of aldehydes with malonic acid in presence of organic bases. II. Condensation of salicyl-aldehyde, A., 626.
- Khan, A. H., stony deposits in the gluteal muscles of a horse, A., 1397.
- Kharasch, M. S., organic arsenic or antimony seleno-compounds, (P.), B., 287.
- and Foy, (Mrs.) M., peroxide effect in the Cannizzaro reaction, A., 1238.
- and Legault, R. R., ergotocine; active principle of ergot responsible for the oral effectiveness of ergot preparations on human uteri, A., 872. Ergotocine, A., 995. New active principle(s) of ergot, A., 1157.
- See also Du Pont de Nemours & Co., E. I.
- Kharaz, S. S., and Gornostai polski, S. E., use of jute rags in composition of copying papers, B., 489.
- Kharchenko, V. N. See Blumberg, I. B.
- Kharin, A. N., conductivity determinations of nicotine and ammonia in tobacco, A., 133.
- Kharitonova, M. M. See Pchelin, A. A.
- Kharikov, D. V., fertilisation of cotton in a crop-rotation system, B., 566.
- Kharyuzova, E. D., chestnut, A., 1432.
- Khastgir, S. R., surface-force theory of crystal rectification, A., 282. Effect of heat, ultra-violet light, and X-rays on crystal rectification, A., 566. Surface-force theory of rectification in ionic crystals, A., 915.
- and Gupta, A. K. D., rectification phenomenon in a pyrolusite crystal, A., 12. Rectification of alternating current by crystals, A., 682.
- Khaustov, N. W. See Charit, A. J.
- Kheifetz, A. See Schneider, F.
- Kheifetz, D. M. See Askinasi, D. L.
- Khelemski, M. Z., Shoikhem, I. I., and Glukhovski, I. E., large-scale preservation of beet diffusion juice, B., 200.
- Khinehin, Y. G., influence of aluminium sulphate on retention of kaolin by paper, B., 58.
- Khisin, Y. I., and Vasilchakova, V. F., nitrogen in liquid low-temperature carbonisation products of Kashpira shale, B., 211.
- Khitrik, S. I., and Poznanski, A. E., smelting ferrosilicon from roasted pyrites, B., 27.
- Khitrin, L. N., diffusion of gases through metals, A., 293.
- Khodakov, A., accelerated sulphate[celulose] cooking with excess liquor removal, B., 1136.
- Kholdinin, N. N., Karabugaz sulphate in glass-making, B., 495.
- Khomjakov, K. G., Javorovskaja, S. F., and Shirokikh, P. K., heats of solution and of dilution of potassium and ammonium phosphates, A., 705.
- See also Popov, M. M.
- Khotinski, I. See Belkin, S.
- Khour, J., microburette with interchangeable jets, A., 952, 1218.
- Khouvine, Y., alkaline conversion of β -glucoheptose, A., 69.
- and Soeters, K., *Bacillus cellulosa* dissolvens and thermophilic fermentation of cellulose, A., 1167.
- Khudyakova, L. D., densities of petroleum products: between -20° and 100° , B., 212.
- and Chistovich, P. S., densities of petroleum products: between 0° and 50° , B., 212.
- Khviuzov, P. V. See Nepenin, N. N.
- Khyuter, F., slow and rapid pulping of wood for production of viscose rayon, B., 490.
- See also Bogdanov, S. I.
- Ki, C. F. See Liang, T. H.
- Kibe, M. M., effect of added fat and protein on hydrolysis of rice starch, A., 532.
- See also Sahasrabuddhe, D. L.
- Kidd, F., food storage and transport, B., 605.
- and West, C., apple storage, B., 246.
- Kidde & Co., Inc., W., [electro-optical] apparatus for detecting suspended matter in fluids, (P.), B., 507, 533.
- Kidwell, C. H., and Vanderbilt Co., R. T., paint compositions, etc., (P.), B., 1103.
- Kiech, C. F. See Eddy, H. C.
- Kiefer, E. F. See Chaney, N. K.

- Kiefer, G. C., Scharschu, C. A., and Allegheny Steel Co., inorganic insulation for electrical sheets, (P.), B., 275.
- Kiefer, K., metallising with reflecting highly polished surface celluloid in sheets and any other form by chemical means, (P.), B., 107.
- Kieferle, F., crustless cheese, B., 285.
- Kiehl, S. J., and Loucks, R. D., systematic p_H values of solutions in the alkaline range, A., 305.
- Kielland, J., thermodynamical treatment of base-exchange equilibria; real solid solutions of two zeolite components, A., 1075. Thermodynamics of base-exchange equilibria of different kinds of clays, A., 1075.
- Kielpiński, J., composition of organic matter and nitrogen compounds in soils of the Tatra mountains in relation to manuring and to plant associations, B., 968.
- Kiener, C., removal of stains from fabrics, (P.), B., 542.
- Kienle, R. H. See Brit. Thomson-Houston Co.
- Kienzl, H., breaking length and stretch [of paper], B., 222.
- Kiesel, A., and Belozersky, A., protoplasm. V. Nucleic acid and nucleoproteins of pea embryos, A., 422.
- and Kastrubin, M., variations in composition of protein of ripening wheat grains, A., 264.
- and Schipitzina, G., plant reproductive cells. IV. Chemical constituents of spores of *Aspidium filix mas.*, A., 420.
- Kieser, K., chemistry of [photographic] fixing baths, B., 430. Regeneration of [photographic] fixing baths, B., 526.
- Kiess, C. C., arc spectrum of copper in the infra-red, A., 1045. Infra-red arc spectrum of chromium, A., 1183.
- Kiessig, H., lines of the M series of niobium to silver, A., 1184.
- See also Broili, H.
- Kiessling, G., magnetic behaviour of ferromagnetic substances when the magnetising field is cut off, A., 573.
- Kiessling, W., synthesis of isomeric glyceric acid-phosphoric acids [phosphoglyceric acids], A., 471. Synthesis of *enol*-phosphopyruvic acid, A., 731.
- See also Meyerhof, O.
- Kietaibl, K., present position of the wood-carbonising industry, B., 834.
- Kihara, G. See Tamura, K.
- Kihara, Y., carbohydrates in bulbs of *Allium*. III. IV. Hydrolysis of scorodose by enzymes, A., 673, 1435.
- Kihlgren, T. E., Pilling, N. B., and Wise, E. M., physical and casting properties of nickel silvers, B., 905.
- Kijarfeld, B. N., and Plokhotzki, E. S., electrical and photo-technical properties of high-pressure mercury-vapour discharges, A., 676.
- Kijewska, M. See Dominikiewicz, M.
- Kijowski, S. W. See Bekier, E.
- Kik, M. C. See Sure, B.
- Kikoin, L., new photo-electric effect of cuprous oxide, A., 1055.
- See also Fakidov, I.
- Kikuchi, K. See Saegusa, Hikoo.
- Kikuchi, Seishi, theory of refractive index of crystals for cathode rays and breadth of reflexion line, A., 570.
- Kikuchi, Seishi, and Aoki, H., counter of the Wynn-Williams type, A., 466.
- Husimi, K., and Aoki, H., excitation of γ -rays by slow neutrons, A., 1296.
- Nakagawa, S., and Aoki, H., range of disintegration particles obtained from lithium and boron by bombardment with protons, A., 426. Fermi proton effect in silver, A., 803.
- Kikuchi, Shinichi, lithium cobaltinitrite, A., 178.
- Kikuta, Takesi, changes in sugar, lactic acid, and protein contents of lymph and blood. I. Effect of insulin. II. Effect of adrenaline and pituitrin. III. Lactic acid metabolism following experimental liver damage, A., 1261.
- Kikuta, Tario, growth of cast iron by heating at elevated temperature, B., 1046.
- Kikuth, W., and Schönhöfer, F., gametocidal action of plasmoquin, A., 895.
- Kiladze, D. N. See Tananaev, N. A.
- Kilbourne, K. A., Booth, C. F., and Swann Research, Inc., crystalline anhydrous disodium phosphate, (P.), B., 899.
- Kilde, G., measurements with the glass electrode, A., 952.
- Kilgore, L. B., testing mustard for mayonnaise, B., 251.
- and Wheeler, D. H., effect of varying the conditions of the air-blowing accelerated test for oils and fats, B., 912.
- Kilian, V., radiotropism in plants as shown by seedlings of *Pharbitis hispida*, A., 134. Chemical basis of mud therapy, A., 781.
- and Antonický, S., regulation of media by plant tissues, A., 671.
- Killeffer, D. H., stable organic compounds in power generation; diphenyl-diphenyl oxide mixtures in a boiler plant, B., 577.
- Killian, D. B., Hennion, G. F., and Nieuwland, J. A., preparation of α -unsaturated ethers from $\beta\beta$ -dimethoxyalkanes [ketals], A., 606.
- Killian, J. A. See Eyerly, K.
- Killian, M. J. See Griem, W. B.
- Killinger, G. B., and Smith, F. B., variations in chemical composition of soils of various types, B., 1009. Importance of soil colloids to soil micro-organisms, B., 1010.
- Killough, D. T. See Reynolds, E. B.
- Kilp, W., curtailing time of fermentation, B., 202.
- and Deplanque, R., stage of fermentation at which fusel oil production commences, B., 169.
- Kilpatrick, A. S. See Holt, T. W.
- Kilpatrick, M., effect of electrolytes in ionic reactions, A., 42. Acids, bases, and salts, A., 702.
- See also Osol, A., and Riesch, L. C.
- Kilpi, S., equivalence point in acid-base titrations, and effect of electrolytes, A., 594. Buffer action and reciprocity of the acid-base function, A., 1091. End-point of potentiometric titration of weak acids and bases, A., 1214.
- and Laaksonen, A., salt error of indicators in acid-base titration, A., 594.
- Kim, M. S., blood-cholesterol in Koreans on ordinary diet, A., 642.
- Kimball, G. E., electronic structure of diamond, A., 1306.
- Kimball, H. D., properties of plaster of Paris and effects of varying the manipulation, B., 993.
- Kimball, W. S., viscosity and heat conduction according to the geometrical weight method compared with other treatments, A., 1065.
- Kimberly, A. E. See Zimmerman, E. W.
- Kimizuka, K., antigenic properties of lipins, A., 375.
- Kimm, R., crystalline derivatives of vitamin-E, A., 1546.
- Kimmel, L. See Morgan, A. F.
- Kimmelstiel, P., and Laas, E., morphological studies on lipin antagonism: experimental cerebrosidosis, A., 515.
- Kimura, G., solubility product of silver sulphide and standard electrode potential of sulphur, A., 584. Transition point and thermodynamic values of silver sulphide, A., 1078.
- Kimura, K., and Tsunoda, Y., application of X-ray spectroscopic method to the analysis of the rarer elements. IV. Determination of gadolinium in rare-earth mixtures, A., 1338.
- Kimura, M. See Hatoyama, M.
- Kimura, O. See Sata, N.
- Kimura, S., catalytic action of active carbon on terpenes and related compounds, A., 1375.
- Kimura, T., kernel roasting [of chalcopyrite], B., 152.
- Kimura, W., semi-micro-volumetric determination of halogens (sodium-higher alcohol method), A., 183, 769. Influence of higher alcohols and of ether on titration of halogens by Vollhard's method, A., 183. Reduction [dehalogenation] of fatty acid bromides, A., 845.
- Kimura, Y., biological action of rays from radioactive substances. I. Effect of small dose radiation on the reproductive activity of a unicellular organism, A., 1539.
- Kin, Y., metabolism in hepatic diseases. VI. Blood-sugar, A., 237. Relation between acidosis and intermediary metabolism. I., A., 524.
- Kind, G. G., horse-sickness. II. Nature of immunising agents in formolised virus, A., 1420.
- Kind, J. See Salmang, H.
- Kindler, H. See Matossi, F.
- Kindler, K., significance of amines in chemotherapy. I., A., 120.
- and Brandt, E., synthesis of pharmacologically important amines. X. Catalytic hydrogenation of ω -nitrostyrenes to β -arylethylamines, A., 1492.
- and Peschke, W., mechanism of chemical reactions. VI. Significance of molecular compounds in catalytic hydrogenations. II., A., 1362.
- Kindred, J. E., reactions of haemoglobiniferous cells to acid and basic dyes under varying conditions of hydrogen-ion activity, A., 372.
- Kindseher, E., use of bituminous material as under-water paints, B., 1054.
- Kinetic Chemicals, Inc., fluorine derivatives of hydrocarbons, (P.), B., 664.
- See also Daudt, H. W., and Holt, L. C.
- Kinetic Elutriators, Ltd., and Frangley, A. J., mechanism for classifying powdered material by elutriation, (P.), B., 754.
- King, A., flotation of Witwatersrand ore products (laboratory results), B., 232.
- King, Alexander, chemisorption on charcoal. V. Influence of ultraporosity on adsorption. VI. p_H of charcoal suspensions, A., 160, 1069. Porosity of charcoal, A., 930.

- King, Alexander, and Lawson, C. G., chemisorption on charcoal. IV. Influence of activation on the sorption of water vapour, A., 28.
See also Emeléus, H. J.
- King, Allen, double refraction of interfacial layers of normal aliphatic acids, A., 1452.
- King, A. M., and Garner, W. E., heats of crystallisation of ethyl esters of monobasic aliphatic acids, A., 21.
- King, A. S., electric furnace ionisation effect, A., 3. Temperature classification of infra-red iron lines, A., 145.
See also Russell, H. N.
- King, A. T., influence of atmospheric sulphur on dyes and fabrics, B., 540.
See also Wool Industries Res. Assoc.
- King, C. G. See Baker, Z., Bessey, O. A., and Weber, H. H. R.
- King, C. J., Eaton, E. D., and Hope, C., catalase activity in relation to age and viability of sclerotia of the cotton root-rot fungus, A., 798. Microbiological activities affected in manurial control of cotton root rot, B., 516.
- King, C. R. See Ralston, O. C.
- King, C. F., reaction rates of solid-liquid interfaces, A., 829.
and Schaek, M., rate of solution of zinc in acids, A., 1083.
- King, E. G., Brauns, F., and Hibbert, H., lignin and related compounds. XVIII. Ligninsulphonic acid—its isolation and structure, A., 1373.
See also Gray, K. R.
- King, E. J., and Armstrong, A. R., determination of serum- and bile-phosphatase activity, A., 403.
See also Armstrong, A. R., Botterell, E. H., and Robson, W. D.
- King, F. A. See Digby, W. P.
- King, F. B., Simonds, R., and Aisner, M., tyrosine content of tissues after intravenous injection, A., 890.
- King, F. E., dielectric derivatives of simple aliphatic ketones, A., 1107.
and L'Ecuyer, P., indoleacetic acids, A., 222.
and Robinson, R., synthesis of physostigmine (eserine). XI. Later phases of the synthetical investigations, A., 996.
- King, G. B. See Hazel, F.
- King, G. D., and U.S. Gypsum Co., gypsum plaster, (P.), B., 1097.
- King, H., curare, A., 655. Tubocurare, A., 1138. Curare alkaloids. I. Tubocurare, A., 1514.
See also Dyke, W. J. C., and Rosenheim, O.
- King, H. H., destruction of locusts in flight by means of a poison dust (sodium arsenite) delivered from aircraft, B., 1014.
- King, H. I., and Robertson, A., synthesis of rotenone and its derivatives. VI. Chromenochromones, A., 1130.
- King, H. S., fractional distillation; analysis of organic liquids, A., 1098.
and Merriam, M. K., preparation of *m*-xylol chloride, A., 1114.
- King, J. D., factors predisposing to immunity to dental caries; vitamins, A., 382.
See also Mellanby, M.
- King, J. G., conversion of creosote into motor spirit, B., 660.
See also Cawley, C. M., and Sinnatt, F. S.
- King, J. L. See Hoopes, E. C.
- King, J. T., preventing choking of oil wells, etc., (P.), B., 891.
- King, L. A., jun. See Burrows, G. H.
- King, L. A. L., Meikle, A. A., and Broadfoot, A., timothy-grass fly (*Amaurosome armillatum*, Zett.), B., 822.
- King, L. E., chalking of white paints, B., 238.
- King, N. S., and Uvarov, O., urine analysis, A., 1006.
- King, P. S. See Li, E. K.
- King, R. B. See Renwick, F. F.
- King, R. M., mechanics of enamel suspension. II. Electrodialysis of enamels and glasses, B., 901.
and Nat. Aluminate Corp., vitreous enamel slips, (P.), B., 23.
See also Carter, W. K., Cayford, J. M., Housley, W. L., and Terry, G. E.
- King, W. E. See Denham, H. G.
- Kingsbury, R. M. See Paine, H. S.
- Kingsley, D. M., new haematological stain. I. Constituents and methods of use, A., 1517.
- Kingzett, C. T., absorption of oxygen by phosphorus, A., 181.
- Kinker, C. C., and Owens-Illinois Glass Co., glass furnace, (P.), B., 851.
- Kinkulski, R. See Fedoteev, N.
- Kinnear, H. B. See Williams, C. E.
- Kinnersley, H. W., O'Brien, J. R., and Peters, R. A., crystalline vitamin-B₁, A., 544. Improved yields of vitamin-B₁, A., 544. Properties of blue fluorescent substances formed by oxidation of vitamin-B₁ (quinoxalines), A., 1429.
- Kinney, C. R., and Larsen, R. G., behaviour of unsaturated hydrocarbons towards the Grignard reagent at elevated temperatures, A., 1115.
and Pontz, D. F., boranilide, A., 969.
- Kinney, G. F. See Garman, R. L.
- Kinnison, A. F., and Finch, A. H., effects of special practices influencing nutritional balance on yield, texture, and time of maturity of grapefruit, B., 422.
- Kino, K., polymerisation of methyl esters of higher unsaturated fatty acids. XV. Structure of polymerisation product of methyl linolate, A., 473. Attempt to prepare drying and non-drying oils without fish odour from common sardine oil, B., 560.
- Kinsburgskaja, F. See Plevako, E.
- Kinsey, V. E., effect of X-rays on glutathione, A., 1212.
- Kinsler, L. E., and Houston, W. V., anomalies in the Zeeman effect of helium, A., 1437.
- Kintzel, W., phosphoric acid problem of tropical and sub-tropical agriculture with special consideration of the Brazilian situation, B., 72.
- Kinzel, A. B., and Electro Metallurg. Co., composite metal [case-hardened steel] article, (P.), B., 503.
See also Linde Air Products Co.
- Kinzie, C. J., and Commons, C. H., jun., discussion of thermal-expansion methods [for glass enamels] from theoretical and practical viewpoints, B., 1093.
- Commons, C. H., jun., and Titanium Alloy Manufg. Co., vitreous enamels, (P.), B., 271.
and Plunkett, J. A., titanium compounds and application thereof in vitreous enamels, B., 545.
and Titanium Alloy Manufg. Co., enamelling composition, (P.), B., 228. Vitreous enamel frit, (P.), B., 307.
- Kinzoko Zairyo Kenkyusho, [nickel-cobalt-titanium-iron] alloy for permanent magnets, (P.), B., 810.
- Kip, H. E., and Currie, L. M., preventing seepage through linings, B., 785.
- Kiparisov, G. N. See Pamfilov, A. F.
- Kipfer, P., high-pressure Wilson cloud chamber, A., 598.
- Kiplinger, C. G. See Nat. Aniline & Chem. Co.
- Kippen, A. A. See Loeb, L.
- Kipper, H. B., digestion of vegetable growths to produce cellulose, (P.), B., 799, 1089, 1137.
and Knox, R. B., formation of nitrates of metallic elements [e.g., calcium], (P.), B., 629.
- Kipperman, E. C. S. See Bertram, S. H.
- Kipping, F. B., properties of optically active sulphonylthioethanes, A., 340. Lactone of γ -hydroxyvinylacrylic acid, protoanemonin, A., 1223.
- Kipping, F. S., and Blackburn, J. C., organic derivatives of silicon. XLIX. Reduction of the tetranitrotetra-phenylsilicanes, A., 1258.
and Cusa, N. W., organic derivatives of silicon. L. Nitration of phenyltriethyl-, diphenyldiethyl-, and triphenylethyl-silicane, A., 1258.
See also Abrams, J. T.
- Kiprianov, A. A. See Dragunov, S. S.
- Kiprianov, A. I., and Daschevski, M. M., oxidation of acenaphthene to acenaphthenequinone, A., 347.
and Kusner, T. S., chlorination of methane; preparation of carbon tetrachloride, B., 938.
- Kirashima, K., influence of sodium salts on growth and on morphology of cultures of fibroblasts *in vitro*. II. Sodium nitrate, nitrite, bromate, iodate, sulphate, thiosulphate, and phosphate, A., 392.
- Kirby, G. W., Frey, C. N., and Atkin, L., growth of bread moulds [*Aspergillus niger*] as influenced by acidity, B., 652.
- Kirby, J. E. See Du Pont de Nemours & Co., E. I.
- Kirby, P. H. See Freeman, J. R., jun.
- Kirby, R. H. See Gilman, H.
- Kirch, E. See Clark, A. H.
- Kirchhof, F., rubber regeneration and regenerates, B., 600. Evaluation of rubber regenerates by analysis, B., 685.
- Kirchhoff, H. See Gassner, G., and Liebermann, H.
- Kirchner, F., transformation of chemical elements by bombardment with hydrogen nuclei, A., 1186.
and Lassen, H., new interference phenomenon on the passage of rapid electrons through crystals, A., 1451.
and Neuert, H., transformation of beryllium by rapid protons, and mass of Be⁹, A., 277.
- Kireev, V. A., Kaplan, S. I., and Romantschuk, M. A., determination of solubility of ethylene, propylene, and butylene in certain solvents at -20° to 40°, at pressures less than atmospheric. V, A., 1067.
- Kaplan, S. I., and Vasneva, K. I., determination of solubility of acetophenone and chloroacetophenone in several solvents, A., 1315.
- Kaplan, S. I., and Zlobin, V. N., equilibria in liquid mixtures and solutions. III. B.p. and composition of vapour phase of the systems benzyl chloride-toluene and ethylene chlorohydrin-water, A., 575.

- Kireev, V. A., Klinov, I. J., and Rambaeva, A. M., dynamic activity of silica gel with respect to benzene vapour, B., 714.
- Kirillov, I. P. See Postnikov, V. F.
- Kirillov, N. I., methyl-*p*-aminophenol, A., 744.
- Kiriushkin, V. A. See Liutin, L. V.
- Kirk, C. M. See Holt, L. E., jun.
- Kirk, E., ability of nephritic patients to deaminate and form urea from ingested glycine, A., 1010.
- Kirk, E. J., oedema, especially oedema of renal origin, A., 1402.
- Kirk, E. W. See Brit. Celanese.
- Kirk, L. E., Stevenson, T. M., and Clarke, S. E., crested wheat grass, B., 251.
- Kirk, P. L., preparation of sintered glass filters, A., 599.
- and Dod, K., volumetric modification of the Pregl halogen micro-combustion method for organic iodine, A., 1515.
- See also Bullock, B., and Crosby, B. L.
- Kirk, R. C., and Bradt, W. E., effect of direct current on nitration and oxidation of toluene, A., 589.
- Kirkby, W. A., correlation of ionisation and radiation in carbon monoxide-oxygen explosions, A., 451. Correlation of flame movement and ionisation current during explosions, A., 451.
- Kirke, P. St. G., heat transmission in waste-heat boilers, B., 785.
- Kirkham, A. See Hock, A. L.
- Kirkhof, G. A., and Akoniantz, E. A., thiocarbamide, A., 851.
- and Albitzka, O. P., *p*-aminophenol, B., 664.
- and Stepanov, A. D., saligenin, A., 857.
- Purification of benzonaphthol, A., 970.
- Kirklees, Ltd., and Bennett, A., funnels for use in centrifugal spinning machines for artificial silk, (P.), B., 1090.
- Kirkpatrick, P., arrangement for demonstrating and studying the Zeeman effect, A., 1098.
- and Hare, D. G., depth distribution of origins of characteristic X-rays from thick targets, A., 138.
- and Ross, P. A., determination of *h* by X-rays, A., 1298.
- See also Pockman, L. T., Ross, P. A., and Webster, D. L.
- Kirkpatrick, W. H., and Parker, P. T., dibenzofuran[diphenylene oxide]. VII. Amino-derivatives, A., 985.
- See also Gilman, H.
- Kirkwood, D., zinc-base die casting, B., 361.
- Kirkwood, J. G., theory of strong electrolyte solutions, A., 33. Statistical mechanics of fluid mixtures, A., 816.
- Kirkwood, W. O., conservation of heat energy in relation to horizontal-retort practice, B., 341.
- Kirner, W. R., microchemical analysis of solid fuels, B., 1027.
- Kirpal, A., Galuschka, A., and Lassak, E., ψ -chlorides and ψ -esters of *o*-dicarboxylic acids, A., 1123.
- Kirrmann, A., allyl change; studies by the Raman effect, A., 197.
- and Graves, M., synthesis of benzene hydrocarbons, A., 203.
- Kirsanov, A. T., partial introduction of hydrogen and iron into [soil] adsorption complex, B., 198.
- Kirsanov, A. V., and Suslina, V. N., application of ozone to examination of petroleum products. I. Desulphuration of benzene from Tschusov petroleum by ozonisation, B., 709.
- Kirsch, W., influence of feeding silage on nitrogen and mineral metabolism, with special reference to acid silage, B., 922. Use of hydrochloric acid in silage-making and its effect on the animal body, B., 922.
- and Jantz, H., value of ammonium bicarbonate in nitrogen metabolism of ruminants: milch cows and sheep, B., 379. Value of the decomposed protein in silage in the nitrogen metabolism of cattle, B., 699.
- See also Bünger, H.
- Kirschbaum, E., equipment and work of chemical-engineering laboratories of Technische Hochschule, Karlsruhe, B., 177.
- Kirschbraun, L., Levin, H. L., and Patent & Licensing Corp., emulsions or dispersions, (P.), B., 295.
- and Patent & Licensing Corp., waterproof composition, (P.), B., 308. Rubber emulsion and its manufacture, (P.), B., 369. Aqueous dispersions [of bitumen], (P.), B., 616. Rubber-asphalt dispersion, (P.), B., 962. Waterproof sheet, (P.), B., 1139.
- See also Universal Oil Products Co.
- Kirsebom, G. N., and Calloy, Ltd., refining of metals [steel, nickel, copper, tin, and lead], (P.), B., 135. Recovery of alkaline-earth and other metals from drosses and other metal-bearing substances, and preparation of alkaline-earth metal alloys [with lead or cadmium], (P.), B., 236.
- Kirsh, D., factors influencing activity of fungus-lipase, A., 534.
- Kisch, B., biochemical differences between cortex and medullary substance of the kidney, A., 777. Respiration values of fresh mammalian tissue, A., 1405. Influence of optically-active amino-acids on tissue metabolism, A., 1405.
- Kiselev, A. L., electro-titrometer for control of sulphuric acid concentration in factory practice, B., 60. "Mono" gas analyser for oxygen determination, B., 60.
- Kiselev, G., cold-vulcanisation method for attachment of rubber soles, B., 862.
- Kiselev, N. N., and Kuzmina, K. A., flow and coagulation of latex in *Scorzonera Tau-Sagiz*, A., 1431.
- Osipov, A. P., and Kuzmina, K. A., formation of rubber and resin and their movement in plants, A., 796.
- Kiselev, P. V., and Lukjanov, S. Y., production and properties of caesium photo-electric cells, B., 681.
- Kishi, H. See Ishibashi, M.
- Kishi, S. See Toyoda, H.
- Kishi, Y., constituents of mulberry leaves: proteins. VI. Variation in amount of protein synthesised. VII. Indirect causes which affect quantity, in the silk-worm and the silk, of proteins accumulated from proteins in mulberry leaves. VIII. Metabolism of proteins in silk-worms when quantity of the soluble carbohydrates in mulberry leaves is small. X. Quantity of sericin and fibroin in the silk due to difference in constituents of mulberry leaves and growth of the leaves, A., 1146.
- Kishino, S., solid solubility of silicon in aluminium, A., 693. Electrical resistance of heat-treated aluminium alloys containing a small quantity of iron, B., 501. Alloying of aldre-type light alloys, B., 553. Ageing of aldre-type light alloys made by two different melting processes, B., 553.
- Kisner, P., West, E. S., and Key, J. A., effect of gelatin feeding on pseudohypertrophic progressive muscular dystrophy, A., 383.
- Kiss, A. von, neutral salt action of reaction between acetylglucolate and hydroxyl ions in dilute solution, A., 709.
- and Bossányi, I., influence of temperature on velocity of ionic reactions in aqueous solutions of non-electrolytes, A., 1327.
- and Geszner, M., causes of colour changes of cobalt salts in neutral salt solutions, A., 1051.
- and Kukai, R., influence of temperature on velocity of ionic reactions. II., A., 938.
- and Urmánczy, A., dissociation constants of formic and acetic acids in concentrated salt solutions, A., 166. Mechanism of reactions in which the reactants diffuse through a membrane, A., 1328.
- Kissel, P. See De Lavergne, V.
- Kisser, J., and Beer, I., chemotropic sensitivity of dicotyledonous seedlings, A., 266.
- and Portheim, L., use of hydrogen peroxide as a seed dip, B., 245.
- Kissin, M. See De Meio, R. H.
- Kistiakowski, G. B., Romeyn, H., jun., Ruhoff, J. R., Smith, Hilton A., and Vaughan, W. E., heats of organic reactions. I. Apparatus and heat of hydrogenation of ethylene, A., 304.
- Ruhoff, J. R., Smith, Hilton A., and Vaughan, W. E., heats of organic reactions. II. Hydrogenation of simpler olefinic hydrocarbons, A., 825.
- and Smith, W. R., kinetics of thermal *cis-trans* isomerisation. IV., A., 452.
- See also Cuthbertson, G. R., Du Pont de Nemours & Co., E. I., and Smith, Hilton A.
- Kistler, S. S., relation between heat-conductivity and structure in silica aerogel, A., 444.
- and Kearby, K., residual water in activated silica gel, A., 1075.
- Kita, G., Jimbo, S., Riko, R., and Takada, H., viscose. LVIII. Influence of carbonate content of sodium hydroxide, B., 488.
- Jimbo, S., and Takada, H., viscose. LXI. Isolation and purification of highly esterified cellulose xanthates, B., 844.
- Jimbo, S., Tanaka, K., and Riko, S., viscose. LIII. Outflow during spinning, B., 184.
- Kizu, H., and Kadowaki, K., viscose. LX. Spinning tests with a bath containing aluminium sulphate, B., 718.
- Monden, S., and Kizu, H., viscose. LIX. Influence of hemicellulose, B., 488.
- Shojino, M., and Sakurada, I., viscose. LIV. and LV. Influence of cellulose pretreatment and ageing of alkali-cellulose on viscosity and change during ripening. LVI. Change in viscosity and degree of xanthation during ripening. LVII. Viscosity measurements on dilute viscose solutions, B., 184, 587.
- Kitabatake, T. See Sakurada, I.
- Kitaev, N. N., chemically treated straw as a feeding-stuff for cattle, B., 971.
- Kitagawa, C. See Kosaka, Y.
- Kitagawa, K. See Inaba, Takuya, and Satô, Masanori.

- Kitagawa, T.**, emission spectrum of flame of bromine burning in hydrogen and mechanism of the reaction, A., 1291.
- Kitahara, S.** See **Shidei, J.**
- Kitagorodski, I. I.**, and **Bokunjaeva, V. I.**, reaction between sodium chloride and kaolin at high temperatures, B., 722.
- and **Shkolnikov, Y. A.**, formation of sulphate in soda-glass, B., 404.
- and **Solomin, N. V.**, rate of setting of glass during working, B., 404.
- Kitajima, I.**, potentiometric titration of organic precipitates. I. Determination of 8-hydroxyquinoline, anthranilic acid, and the metals precipitable by these two compounds, A., 639.
- Kitajima, M.**, benzantrones with condensed heterocyclic rings, their derivatives, and dyes derived from them. I., A., 763.
- Kitajima, S.**, volumetric determination of silicic acid, A., 1337.
- Kitajima, T.**, nucleic acid-caseinogen compounds; effect of nucleic acid on fibrinogen coagulation, A., 375.
- Kitamura, S.** See **Urbach, E.**
- Kitano, T.**, taka-amylase. I. Amount of glucose formed by the action of taka-diastase on starch. II. Reaction-velocity coefficients for amylase and maltase action. III. Optimum p_H for taka-diastase action. IV. Effect of alcohol and salts on amylase and maltase action. V. Changes in amylase and maltase activities of a taka-diastase solution on keeping. VI. Proportion of amylase and maltase in taka-diastase on purification, A., 1415, 1535.
- See also **Sakurada, I.**
- Kitaoaka, K.** See **Suganuma, I.**
- Kitasato, Z.** [with **Sone, C.**], constitution of hederagenin and oleanolic acid. VII., VIII., and IX., A., 1126.
- Kitayama, H.** See **Aoe, I.**
- Kitchen, F. E.** See **Kitchen, G. R.**
- Kitchen, G. R.**, and **Kitchen, F. E.**, therapeutic value of bismuth-violet, A., 516.
- Kitsee, I.**, and **Mineralite Corp.**, increasing electric-insulating property of ceramics such as porcelain, (P.), B., 316.
- Kittel, H.**, active oxides. LXXXII. Changes in magnetic properties of mixtures of CdO/Fe_2O_3 , CuO/Fe_2O_3 , and PbO/Fe_2O_3 during chemical combination. LXXXIV. Changes in magnetic properties of mixtures of beryllium, calcium, copper, cadmium, and lead oxides with chromic oxide during chemical combination, A., 158, 440.
- See also **Haurowitz, F.**, **Hüttig, G. F.**, **Meyer, Theodor**, and **Waelsh, H.**
- Kitto, W. H.**, rapid determination of nitrogen by a Kjeldahl-Nessler process, A., 53.
- Kitzmiller, K.** See **Machle, W.**
- Kiyota, H.**, electrodeposition of zinc from acid solutions, B., 1050.
- Kizaki, K.** See **Matsui, Motooki.**
- Kizel, A.**, and **Kretovitsch, V. L.**, fructose and fructosides in plant metabolism, A., 673.
- Kizu, H.** See **Kita, G.**
- Kizyk, A.** See **Vintilescu, I.**
- Kjellin, T.**, and **Kylin, E.**, prolan content of cerebrospinal fluid, particularly in essential hypertension, A., 648.
- Kjellman, I.** See **Kuusinen, J.**
- Kjerrman, B.**, and **Bohm, I.**, uniform hardening of large bearing races, B., 153.
- See also **Bohm, I.**
- Klaassens, K. H.** See **Houwink, R.**
- Klärning, J.**, physico-chemical principles of fluxing iron ores. I., II., and III., B., 309, 1144. Casting of commercial zinc, B., 678.
- Klages, F.**, molecular sizes of methylated oligosaccharides, A., 1355.
- Klaiber, H.** See **Grube, G.**
- Klanfer, K.**, and **Engelberg, H.**, bacteriology of the liming process [in leather manufacture], B., 739.
- Klang, H.**, absorption and refraction of light by aquamarine and yellow and green beryls, A., 1100.
- Klapp, E.**, practicability and after-effects of lucerne cutting, B., 326.
- [with **Stählin** and **Zäpfle**], influence of irrigation with potash-factory effluents on permanent meadowland, B., 1109.
- Klapper, K.**, effect of addition of small amounts of cystine to a diet deficient qualitatively in protein on metabolism, A., 890.
- Klar, M.**, technical preparation of formaldehyde, B., 893.
- Klar, R.**, adsorption of light and heavy hydrogen on nickel, A., 27. Hydrogenation of ethylene with heavy hydrogen, A., 175. Heterogeneous catalysis. I. Activated adsorption of hydrogen by carbon, A., 940. Adsorption of light and heavy hydrogen in connexion with hydrogenation of ethylene. II., A., 1329.
- Klarmann, E.**, and **Lehn & Fink, Inc.**, germicidal preparation, (P.), B., 174. Hydrocarbon-substituted bromophenols [bactericides], (P.), B., 749.
- Shternov, V. A.**, and **Gates, L. W.**, bactericidal and fungicidal action of homologous halogenophenol derivatives and its "quasi-specific" character. II. Derivatives of *o*-chlorophenol; chlorine-free alkylphenol derivatives, A., 1031.
- See also **Lehn & Fink, Inc.**
- Klarmann, H.**, transformation of aluminium by neutrons, A., 911.
- Klasens, H. A.**, **Perdok, W. G.**, and **Terpstra, P.**, crystallography of magnesium sulphate, A., 1450.
- Klason, P.**, relation between natural order of plants and their chemical composition, A., 420. Assimilation of carbon dioxide by plants, A., 1177. Thioglycollic acid, a reagent for lignin, A., 1259. Chemical composition of seaweed, A., 1434.
- Klass, I. A.** See **Malinowski, A. E.**
- Klatt, R.**, pyrogenic condensation of acetylene and ethylene. I.—III., B., 442.
- See also **Galle, E.**
- Klatt, W.**, indene as a cryoscopic solvent, A., 443. Solutions of organic acids in hydrogen fluoride, A., 582. Physico-chemical behaviour of solutions of alcohols and phenols in liquid hydrogen fluoride, A., 582. Ebullioscopic measurements with solutions of ketones and aldehydes in hydrogen fluoride, A., 820. Determination of lignin in small quantities of wood by means of hydrogen fluoride, B., 408.
- Klauser, F.**, X-ray Laue diagrams of piezoelectric oscillating crystals, A., 570.
- Klaus, R.**, theory of cellulose; mercerised and hydrate-cellulose, B., 299.
- Klavehn, W.**, and **Bilhuber, Inc.**, derivatives of amino-6-methyl-2-heptene-2 [spasmolytics], (P.), B., 749.
- See also **Hildebrandt, G.**
- Klaver, G.**, derivatives of methanedisulphonic acids, A., 472.
- Klaveren, F. W. van.** See **Kuhn, R.**
- Klebanski, A. L.**, and **Dolgopolski, I. M.**, preparation of ethylene glycol from dichloroethane, A., 193. Preparation of propylene glycol from propylene chloride, A., 325.
- Dranitzina, C. A.**, and **Dobromilskaja, I. M.**, new trimeric compound of acetylene; acetylenyldivinyl, A., 957.
- and **Lemke, A. L.**, synthesis of antipyrine and pyramdone, A., 1132.
- and **Tschevitschalova, K. K.**, synthesis of β -chloropropionic acid by condensation of carbonyl chloride with ethylene, A., 845.
- and **Volkenschteiu, A. S.**, preparation of glycerol trichlorohydrin from propylene chloride, A., 959.
- Zurich, L. G.**, and **Dolgopolski, I. M.**, synthetic rubber "sovpren" [chloroprene], A., 1221.
- Kleberger, W.** See **Bömer, A.**
- Klebsattel, C. A.**, modern driers, B., 815.
- Klečka, A.** See **Stránák, F.**
- Klee, F. G.** See **Hartman, R. J.**
- Klees, A. L.** See **Loebell, H. O.**
- Kleffner, J.**, metallurgy of the Haglund process, with special reference to titanium sulphide, B., 552.
- Kleiber, C. E.** See **Standard Oil Development Co.**
- Kleiderer, E. C.**, optical rotation study of the new orally effective principle of ergot, A., 1512.
- See also **Shonle, H. A.**
- Kleimenhagen, K. C.**, and **Carus Chem. Co.**, quinhedrone, (P.), B., 1133.
- Klein, A.** See **Koller, G.**
- Klein, A. J.** See **Karelitz, S.**
- Klein, A. S.**, wood for papermaking, B., 308.
- Klein, C. A.**, and **Fox, J. J.**, limitations of chemical analysis, B., 239.
- Klein, G.**, and **Ziese, W.**, chemistry of vegetable tumours. IV. Peroxidase in the tumours, A., 269. Behaviour of oxidising agents towards purified arginase, A., 404. Arginase in skeletal muscle, A., 1417.
- Klein, Leonard.** See **Ralston, O. C.**
- Klein, Louis.** See **Jackson, Harald.**
- Klein, (Mlle.) N.**, variation with heat treatment of the coefficient of expansion of glass, B., 674. Inequalities of refractive index in interior of glass, B., 725. Variation of refractive index of unannealed glass as a function of time, B., 992.
- Klein, W.**, nuclein metabolism. XXXVII. Nucleosidase, A., 510.
- and **Rossi, Alessandro**, nuclein metabolism. XXXVI. Enzymic study of the constitution of the polynucleotide molecule, A., 510.
- and **Thannhauser, S. J.**, nuclein metabolism. XXXV. Pyrimidine nucleotides from thymus-nucleic acid, A., 510.
- Kleineidam, E.** See **Meythaler, F.**
- Kleiner, J. S.**, compositions for preventing metals [e.g., silver] from tarnishing, (P.), B., 956.
- See also **Tauber, H.**
- Kleinewefers, J.**, calendering of fabrics, (P.), B., 801.
- Kleinicke, W.**, and **Johnson-Losee Corp.**, cuprammonium process for dissolving cellulose, (P.), B., 720.

- Kleinke, E., determination of dielectric constants of solids by the method of mixtures, A., 1217.
- Kleinmann, H., properties of uricase, A., 123.
- Klem, A., reproduction in yeast cultures, A., 1027.
- Klemenc, A., gas discharges with an electrolyte as cathode, A., 1184.
- and Kantor, T., electrolysis in the glow discharge. V. Special behaviour of polar hydrogen and oxygen in electrolysis of aqueous sulphuric acid, A., 457.
- Wechsberg, R., and Wagner, Georg, gas-analytical methods for determination of carbon suboxide in presence of carbon dioxide, carbon monoxide, and oxygen, A., 949.
- Klement, R., chemical constitution of bone salts of healthy and rachitic animals, A., 234. Chemistry of bone-salts, A., 1396.
- and Reuber, R., esters of thio-acids. I. Esters of thio-acids of arsenic and antimony, A., 1390.
- Klementiev, V. A. See Bergman, A. G.
- Klemgard, E. N. See Shell Development Co.
- Klemm, L., and Klemm, W., magnetochemical investigations. XIV. Magnetic behaviour of heavy metal compounds of the phthalocyanines, A., 924.
- Klemm, W., molecular refraction, molecular volume, and b.p. in molecular lattices, A., 916. Significance of magnetic measurements for chemical problems, A., 1311.
- See also Haraldsen, H., Henkel, P., and Klemm, L.
- Klemme, D. E. See Poe, C. F.
- Klemperer, O., annihilation radiation of positron, A., 279. Radioactivity of potassium and rubidium, A., 558. Use of electron lenses for β -rays, A., 1440.
- Klempf, W., Brodkorb, F., and Ges. f. Kohlentech. m.b.H., fertiliser, (P.), B., 568.
- Klenk, E., phosphatides. X. Nature of phosphatides of the spleen in Niemann-Pick disease. XI. Fatty acids of liver-phosphatides and of liver-oil of the Greek tortoise (*Testudo graeca*). XII. Phosphatides and other lipins of brain and liver in Niemann-Pick disease, A., 384, 645, 1265.
- and Diebold, W., actiniasterol, A., 1398.
- Ditt, F., and Diebold, W., depôt-fat of vertebrates, A., 645.
- Klenk, L. See Fricke, R., and Grassmann, W.
- Klepetar, G. See Waelsch, H.
- Kler, M. O., hydrogeology of the springs of the Ilmen district and of Lake Turgoyak (South Urals), A., 953.
- Klevke, V. A., decomposition of ammonium nitrate during evaporation of its solutions, B., 492.
- Kleweta, F. See Guertler, W.
- Kliachko, I., spectrometric analysis of light alloys, B., 65.
- Kliaschko, D. See Suchorukov, K.
- Kliefoth, M. H., and Burgess Labs., Inc., C. P., acoustic tile, (P.), B., 456.
- Kligler, I. J., protein-free suspensions of virus. VI. Purification of vaccine virus by absorption and elution, A., 409.
- Klika, E., cleaning of tinned surfaces, B., 1049.
- Klimek, R., cobalt nitrate as a reagent for pharmaceutical purine preparations, B., 876.
- Klimesch, K. See Hendrych, F.
- Klimov, B. K., Lanin, V. A., and Alezandrov, A., destructive hydrogenation of tars and oils, B., 790.
- Lanin, V. A., and Mordukhovich, E., acetic acid and phenols from distillation of peat, B., 6.
- Klimova, V. A. See Terentiev, A. P.
- Klimovitzkaja, H. B. See Kargin, V. A.
- Kline, L., butyric acid content of wine and vinegar, B., 744.
- Kline, B. E., Elvehjem, C. A., and Halpin, J. G., effect of the hen's diet on bone changes in rachitic chicks, A., 1270.
- Kline, E., and Du Pont Rayon Co., spinning solution, (P.), B., 144.
- Kline, E. K., toxicity of brilliant-green for bacteria, A., 665.
- Kline, G. M., moisture relations of aircraft fabrics, B., 488. Fire-resistant doped fabric for aircraft, B., 626.
- and Drake, N. L., polymerisation of olefines formed by action of sulphuric acid on methylisopropylcarbinol, A., 192.
- Kline, J. K. See Major, R. T.
- Kline, O. L. See Keenan, J. A.
- Klinefelter, T. A., and Meyer, W. W., properties of American kaolins and a comparison with English china clays, B., 768.
- See also MacGee, A. E.
- Kling, A., Gelin, E., and Demesse, J., possibility of substituting determination of total carbon for that of dry extract in analysis of natural vegetable products or their derivatives, B., 1020.
- and Lassieur, A., electrical conductivity of water, A., 1055.
- Kling, A. J. See Gen. Electric Co.
- Kling, E. See Suchorukov, K.
- Kling, K., and Pfanhauser, J., calorimetric apparatus, A., 187.
- and Wicławek, B., natural gases. IV. Fractionation of the low-b.p. hydrocarbons of liquefied natural gas, B., 132.
- Kling, M., and Engels, O., magnesium content of Palatinate soils and importance of this element in plant nutrition, B., 244. Relation between mechanical composition of soils and their root-soluble potassium contents, B., 740.
- Klingenberg, H. See I. G. Farbenind.
- Klinger, E. W. See Carpenter, L. F.
- Klinger, H. See Redlich, O.
- Klinger, P., determination of aluminium in steel. I. As phosphate, B., 310.
- Stengel, E., and Koch, Walter, potentiometric determination of molybdenum and titanium in steel, ferro-alloys, slags, and ores in presence of iron and other metals, B., 677.
- See also Maurer, E.
- Klinghoffer, K. A., permeability of the red-cell membrane to glucose, A., 1391.
- Klingner, F. E., stochastic relations in argillaceous sediments, A., 1101.
- Klingsöhr, H., moisture absorption of mixed-fibre textiles, B., 1135.
- Klingstedt, F. W. See Aspelund, H.
- Klinkenstein, G., finish remover composition, (P.), B., 775.
- and Maas & Waldstein Co., caulking compound, (P.), B., 775.
- Klinkmann, G. H., breaking of bituminous emulsions with stones, B., 391. Viscosity-consistence [of road tar], B., 1080.
- Klinkowski, M., nature and diagnosis of non-parasitic diseases of agricultural crops, with reference to symptoms of potash starvation, B., 326.
- Klinov, I. J., and Arnold, T. I., rapid analysis of aluminium alloys, B., 65.
- and Sitchev, D. I., preparation of aluminium oxide from shale ash by the hydrochloric acid method, B., 802.
- See also Kireev, V. A.
- Klintworth, H. See Kamerman, P.
- Klipstein Chemical Processes, Inc. See Jacobson, B. H.
- Klisiecki, A. J. See Heller, J.
- Klissianis, N. See Joachimglu, G.
- Klit, A., and Langseth, A., Raman spectrum of deuterobenzenes, A., 806.
- Kliukvin, N. A., Polozov, V. F., and Lobus, I. J., conjugated hydrogenation of cresols and naphthalene: hydrogenating a mixture of naphthalene and cresols, B., 1036.
- and Volnov, Y. N., synthetic hydrocarbons from water-gas, B., 54.
- Volnov, Y. N., and Karpinski, M. N., ethyl alcohol synthesis. I, B., 56.
- Voronov, F. N., and Preis, M. O., continuous hydrogenation under pressure, B., 790.
- Kliutschkin, N. See Schettle, I.
- Kljatschikina, B. A., alkaloids in poppy heads, B., 828.
- Kljatschko, I. R., calculation of amount of reagents necessary for softening water, B., 705.
- Klobusitzky, D. von, venom of *Lachesis* (*Bothrops*) snakes. I. Blood-coagulating activity and purification of venom of *L. jararaca*, A., 1394.
- Klockner-Werke, Akt.-Ges., spongy iron, (P.), B., 461. Magnesia and nitrogenous fertilisers from dolomite, (P.), B., 672.
- Klodnizky, N. N., colloidal culture media for bacteria, A., 1419.
- Kloeppel, R., several years' pasture trials in East Prussia, B., 1109.
- Kloister Laboratories Corporation. See Treston, C. J.
- Klooster, H. S. van, simplified mixture calorimeter, A., 1096.
- and Owens, R. M., binary system lead iodide-lead oxide, A., 703.
- and Schaefer, W. J., rapid etching of cementite in steels, B., 457.
- Kloster, A. See Vegard, L.
- Klotz, J., and Amer. Voith Contact Co., Inc., centrifugal separator, (P.), B., 4.
- Klotz, J. R. M., petroleum developments applicable to the protective coating industry, B., 836.
- Klotz, L. J. See Haas, A. R. C.
- Klotz, F. J. See Ivanov, B. I.
- Klug, H. P., crystal structures of *s*-di-iodoethane and *s*-di-iodoethylene, A., 1195.
- See also Pauling, L.
- Kluge, H., toxicological detection of ergot, A., 527. Differentiation of egg-yolk and plant lecithin in macaroni, etc., B., 427.
- See also Zimmermann, E.
- Kluge, L. See Szendrő, P.
- Kluge, W., spectral photo-effect of compact caesium layers, A., 555. Spectral photoelectric sensitivity of composite photocathodes on variation of the supporting metal and alkali metal, A., 1191. Spectral photo-electric poly-selectivity of various surface layers, A., 1447.
- Klugmann, Alfred. See Klugmann, Arthur.

- Klugmann, Arthur, Klugmann, Alfred, and Browne, H. C., apparatus for heating liquids, (P.), B., 435.
- Klumpp, T. G., determination of iron in biological materials, A., 270.
- Klunne, P. S., substitution of enamelled iron vessels for glass beakers, B., 591.
- Kluskmann, E. See Euler, H. von.
- Kminek, M. See Staněk, F.
- Knaggs, J. E., crystal structure of cyanuric triazide, A., 434, 687, 1194.
- Knaggs, J., and Pirie, Appleton & Co., Ltd., dry adhesives composed of rubber or rubber latex, (P.), B., 739.
- Knake, E., relationship between tissue growth, glycolysis, and oxygen tension, A., 891.
- Knapp, E. A., and Bates, W. R., aëration of cyanide solutions, (P.), B., 629. Apparatus for concentrating or separating gold or gold ore from pulp, (P.), B., 908.
- Knapp, W., constitution of phenylbenzo-xanthenols and β -benzoxanthone, A., 1247.
- Knauer, F., molecular scattering in gases, A., 425.
- Knauss, H. P., and Bryan, A. L., spectral characteristics of electrically exploded mercury, A., 908.
- Strong, H. M., and Johnston, H. L., search for TlO isotope bands, A., 1299.
- and Zumstein, R. V., double-coated Schumann films, B., 1023.
- Knecht, W. See Brüche, E.
- Knechtel, M. M., Indian Hot Springs, Graham County, Arizona, A., 1343.
- Knechtges, O. J., Dawson, F. M., and Nichols, M. S., digestion of mixtures of sludge from domestic sewage and packing-house wastes, B., 431.
- Peterson, W. H., and Strong, F. M., lipins of sewage sludge, B., 208.
- Kneeland, R. F. See Baker, G. L.
- Kneser, H. O., transfer of vibrational energy between molecules, A., 15.
- Excitation of nuclear vibrations of oxygen by molecular collision (according to determinations of absorption of sound), A., 155.
- and Knudsen, V. O., relaxation time of vibrational energy in oxygen and the effect of foreign gases on it, A., 289.
- See also Ellis, J. W.
- Kniasseff, F., modified Babcock method to determine fat in ice cream, B., 1161.
- Knibbs, N. F. S. See Palfreeman, H.
- Knick, H. See Tschesche, R.
- Kniepen, P., and Allgem. Elektrizitäts-Ges., electron-discharge tube, (P.), B., 682.
- Knigge, G., determination of free alkali in soaps, B., 462.
- Knight, A. H. See Imperial Chem. Industries.
- Knight, A. W., and Internat. Precipitation Co., electrical precipitator [for treating gases], (P.), B., 911.
- Knight, C., and Wilson, Arden M., treatment of vanadium ores [crandite], (P.), B., 236.
- Knight, H., oil sprays. I., B., 326.
- Knight, H. G., selenium [in soils], B., 513.
- See also Byers, H. G.
- Knight, O. A., apparatus and method for metallographic work at low temperatures, A., 59.
- Corrosion in the petroleum industry, B., 438.
- Knight, R. A. G., seasoning of timber, B., 994.
- Kniphorst, L. C. E. See Kruisheer, C. I.
- Knipp, C. T., compact vacuum gauge for measuring pressures from 0.2 mm. to 0.0001 mm. of mercury, A., 1476.
- See also Marsh, C. R.
- Knipp, J. K., Zeeman effect in diatomic molecular states having *L*-uncoupling, A., 799.
- Kniskern, W. H. See Atmospheric Nitrogen Corp.
- Knoblauch, H. See Tiede, E.
- Knoblauch, H. C. See Odland, T. E.
- Knoblauch, H. G. See Tiede, E.
- Knoblich, G. See Neumann, B.
- Knoefel, P. K., narcotic potency of cyclic acetals, A., 779.
- Knoll, M. See Kemnitz, G.
- Knoll Akt.-Ges., and Schmidt, K. F., therapeutically active tetrazole derivatives of terpene series, (P.), B., 830.
- Knoop, C. E., Krauss, W. E., and Washburn, R. G., development of nutritional anemia in dairy calves, A., 1268.
- Knoop, H., half-decomposition period in acid hydrolysis as a constant for characterising sugar anhydrides and glucosides; a new fructose [analysis] table, A., 1355.
- Knop, J., and Kubelkova, O., permanganate micro-titration of iron, A., 464.
- Knopp, G., and Centrifugal Eng. & Patents Corp., centrifugal separator, (P.), B., 387.
- Knorr, F., biological decomposition of organic matter of farm manures in arable soils, B., 964.
- Knorr, H. V., and Albers, F. M., fluorescence of solutions of chlorophyll-a, A., 12.
- Knoss, A. F. See Texas Co.
- Knott, E. M. See Daniels, A. L.
- Knott, J. C. See Hodgson, R. E.
- Knowles, A. E., [double-walled] electrodes of electrolytic cells, (P.), B., 683.
- Electrolysis of water, (P.), B., 1100.
- Knowles, E. C., and Cloke, J. B., substituted phenylacetone nitriles and derivatives. I. Phenyl-cyanocyclopropane, α -phenyl- γ -hydroxybutyronitrile, α -phenyl- γ -chlorobutyronitrile, and α -phenylcrotonitrile, A., 1122.
- Knowles, E. G., and Martin, J. C., use of logarithmic sector for quantitative analysis of precipitates, A., 315.
- Knowles, F. See Du Pont de Nemours & Co., E. I.
- Knowles, H. B., use of 8-hydroxyquinoline in determinations of aluminium, beryllium, and magnesium, A., 1216.
- and Redmond, J. C., analysis of feldspar, B., 451.
- Knowles, H. R., Hart, E. B., and Halpin, J. G., variations in calcium level of blood of the domestic fowl, A., 1262.
- Knowlton, G. C. See Hines, H. M.
- Knox, J. R. See Gascoigne, G. H.
- Knox, M. A., and Prowse, I. B., determination of starch equivalent of meadow hays, B., 251.
- Knox, R. B. See Kipper, H. B.
- Knox, W. H., jun., and Victor Chem. Works, granular calcium phosphate, (P.), B., 187.
- Knox, W. J., jun., white lead, B., 366.
- Knoxville Glove Co. See MacIntire, W. H.
- Knudsen, V. O., absorption of sound in gases, A., 1062.
- See also Kneser, H. O.
- Knüppel, H. See Eilender, W.
- Knunjanj, I. L., condensations of aliphatic oxides with 2-aminopyridine, A., 627, 757.
- and Gertschuk, M. P., condensation of α -formylsuccinic esters with esters of α -halogenated acids, A., 1106.
- Knutsen, J. B. M., economic production of milk powder from whole milk, (P.), B., 876.
- Knutti, R. E., Hawkin, W. B., and Whipple, G. H., hæmoglobin and bile-pigment over-production in the splenectomised bile-fistula dog, A., 1147.
- Knyazev, I. I. See Lyuksemburg, M. S.
- Koana, J. See Tanaka, Tutomu.
- Kobayakawa, K. See Masaki, O.
- Kobayashi, K., and Ishikawa, H., detection of Japanese acid clay by the colour reaction of benzidine solution, B., 901.
- Yamamoto, K., Ishikawa, H., and Hinonishi, S., synthesis of liquid hydrocarbons from natural gas. I. and II., B., 292.
- Kobayashi, R. See Tanaka, Yoshio.
- Kobayashi, Tatsuo. See Tamaki, Musakatsu.
- Kobayashi, Teinosuki. See Hoshino, T.
- Kobayashi, Todi, avertin and liver function, A., 394.
- Kobayashi, Yoshito, pharmacological investigation of "senso," a Chinese drug from the dried cutaneous secretion of the toad. IV. Action of ψ -bufotalin and ψ -bufotalin bromide, A., 1274.
- Kobayashi, Yozo, Akai, N., and Furukawa, S., activity coefficients of water in the solution sodium hydroxide-methyl alcohol-water, A., 447.
- and Wang, H., activity coefficients of water in the solution sodium hydroxide ($m=0\sim0.9$)-water, A., 447.
- Kobayasi, M. See Nishina, Y.
- Kobe, K. A., and Gooding, W. L., removal of oxygen from boiler feed-water by sodium sulphite, B., 529.
- and Williams, J. S., confining liquids for gas analysis; solubility of carbon dioxide in salt solutions, B., 258.
- See also Leitz, C. F., and Newstrom, J. E.
- Kobe, Inc. See Coberly, C. J.
- Kobel, M., and Neuberg, C., presence of saponins in tobacco, A., 1040.
- See also Neuberg, C.
- Koblianski, A. G., rapid determination of copper in food-stuffs by deposition on zinc, B., 331.
- Kobosev, N. I., Jerofejev, B. V., Kaverin, I. B., and Bogojavlenskaja, A. N., promoter action of iron ammonia catalysts, B., 801.
- Jerofejev, B. V., and Sluchovski, S. I., thermal decomposition of active and inactive iron nitrates, A., 829.
- Kaschtanov, L. I., and Kobrin, S. M., rôle of catalytic factors in cracking of methane, B., 714.
- and Monblanova, V. V., mechanism of electrodiffusion of hydrogen through palladium, A., 1068.
- and Sokolov, N. N., physico-chemical study of air-depolarisation cells, B., 29.
- Vasiliev, S. S., and Galbraith, E. E., catalytic influence of mercury vapour on cracking of methane by the glow discharge, A., 943.
- Kobozeff, N. See Harde, E.
- Kobrin, S. M. See Kobosev, N. I.
- Koch, E. G. See Smith, G. Frederick.
- Koch, F. C. See Bates, R. W., Dorfman, R. L., Gallagher, T. F., Hathaway, M. L., and Waterman, R. E.
- Koch, G., chemical and optical inter-relations of the brittle mica group, A., 1220.

- Koch, *Henri*, "vital reduction" of silver salts by arthropodal organs, A., 378.
- Koch, *Herbert*, and *Ibing, G.*, composition of the solid paraffin formed in the Fischer-Tropsch benzene synthesis, B., 582. Diesel oil produced by the Fischer-Tropsch benzene synthesis; isolation and chlorination of single paraffin hydrocarbons, B., 709. Constitution of the lubricating oils prepared from kogasin II, B., 889.
- Koch, *J.* See *Fierz-David, H. E.*
- Koch, *P.*, causes of changes in porosity of ceramic bodies on burning, B., 674. See also *Weygand, C.*
- Koch, *R.*, poisoning of yeast by copper during brewing processes, B., 569.
- Koch, *S.*, influence of phosphatic substances on calcium and phosphorus balances [of animals], A., 1274.
- Koch, *W.*, and *Maisin, J.*, effect of organic peroxides on prophylaxis of experimental cancer in mice, A., 1526. Preparation of organic peroxides and peroxidogens, A., 1526.
- Koch, *W.* (Aachen), Bollenrath optical dilatometer, A., 839. Gases in metals, especially non-ferrous metals, B., 636.
- Koch, *Waller*. See *Klinger, P.*
- Koch, *We*, heat content of water and water vapour, A., 690. Latent heat of vaporisation of water in the pressure range 100—200 kg. per sq. cm., A., 1454.
- Koch, *Werner*. See *Reichert, B.*
- Koch, *William*. See *Hercules Powder Co.*
- Kochenderfer, *E. W.*, and *Smith, H. Gregg*, vegetable lecithin as an antioxidant, A., 43.
- Kocher, *N. S.* See *Eastman Kodak Co.*
- Kochmann, *M.*, can chlorogenic acid be formed in coffee poisoning? A., 117. Standardisation of parathormone and its antagonistic effect of oxalic acid poisoning, A., 127. Evaluation of parathyroid hormone by means of sodium fluoride, A., 789. Determination of follicular hormone in commercial preparations, B., 478.
- Kochneva, *N. P.*, influence of radon on internal secretion, A., 1161.
- Kochouchovski, *A. A.* See *Sergueev, A. P.*
- Kochs, chemical preservation of lemonade and of the surface of marmalade, B., 698.
- Kochs, *H. W.*, and *Victor Chem. Works*, cleaning metal [e.g., tinned iron] surfaces, (P.), B., 907.
- Kochs, *J.* See *Reinhold, J.*
- Kock, *G. D.* See *Quirk, A. L.*
- Kocsis, *E. A.*, volumetric determination of iodide ions by Fajans' method, A., 316. and *Pollák, Lili*, Fajans' titration method, A., 836.
- Kodak, Ltd., [shaped] articles from condensation of [poly]vinyl alcohol [with aldehydes], (P.), B., 467. Precipitation of materials from colloidal solutions, (P.), B., 532. and *Beilenson, B.*, cyanine dyes, (P.), B., 1037.
- Bramer, *H. von*, and *Ruggles, A. C.*, metol, (P.), B., 1085. and *Crowther, R. E.*, photographic films, (P.), B., 975. and *Hamer, (Miss) F. M.*, cyanine dyes and their use in photography, (P.), B., 15.
- Kodak, Ltd., and *Malm, C. J.*, colloidsing cellulose esters and manufacture therefrom of highly flexible sheeting, (P.), B., 491*.
- Malm, *C. J.*, and *Fordyce, C. R.*, esters of dicarboxylic acids and compositions containing them, (P.), B., 762. Cellulose esters of dicarboxylic acid and composition containing these esters, (P.), B., 765.
- Mannes, *L. D.*, and *Godowsky, L. jun.*, colour photography, (P.), B., 703. and *Murray, A.*, production of metal casts from gelatin and similar heat-developable reliefs, (P.), B., 506.
- Kodama, *S.* See *Okabe, T.*
- Kodama, *T.* See *Fujita, A.*
- Kodera, *K.*, effect of inspiration of oxygen and of air rich in carbon dioxide, or poor in oxygen, on energy exchange and intermediate carbohydrate metabolism. II. Effect of physical work on gas metabolism. III. Effect of fatigue during muscular exercise. V. Effect on lactic acid synthesis of nephrectomised animals, A., 520. and *Sugimoto, H.*, carbohydrate and respiratory metabolism in muscle during alkalosis due to hyperventilation, A., 520.
- Köbner, *T.* See *Karrer, P.*
- Koehlin, *R.*, [description of minerals], A., 842.
- Köck, *G.*, fumigation of seed potatoes with hydrocyanic acid, B., 647.
- Köckemann, *A.*, substance in fleshy fruits inhibitory to germination, A., 264.
- Koefoed, *Hauberg, Marstrand, & Helweg A./S. Titan*, centrifugal separators, (P.), B., 787. See also *Nyrop, A.*
- Kögel, *G.*, sensitivity of organic substances to X-rays, A., 832.
- Kögl, *F.*, growth-promoting substances of the auxin and the bios group, A., 418. and *Boer, A. G.*, constitution of perezone, A., 1501. and *Deijs, W. B.*, colouring matters of fungi. XI. Boletol, the colouring matter of the blue-coated *Boletus*. XII. Synthesis of boletol and iso-boletol, A., 347. and *Erxleben, H.* [with *Michaelis, R.*, and *Visser, H. S.*], plant growth substances. XV. Synthesis of auxin-glutaric acid and of some isomerides, A., 1351. and *Kostermans, D. G. F. R.*, plant growth substances. XVI. Constitutional specificity of hetero-auxin, A., 1351.
- Kögler, *F.*, determination of sodium as sodium magnesium uranyl acetate, A., 1215.
- Köhler, *A.*, and *Leitmeier, H.*, fluorescence experiments on natural sulphates, A., 1479.
- Koehler, *A. E.*, and *Allen, S. E.*, nutritive value of lactose, A., 240.
- Köhler, *B.*, single-bath chromium scouring [of leather] and its graphical calculation, B., 777.
- Köhler, *E.*, and *Hey, A.*, potato tests of relationship between the potential of the tubers and incidence of virus, A., 554.
- Köhler, *G.*, effects and avoidance of air-leaks in the open-hearth furnace, B., 548.
- Köhler, *G.* See *Sjöberg, K.*
- Köhler, *H.*, comparative investigations on vertical-retort and vertical-chamber ovens [in gas manufacture] and validity in practice of laboratory results obtained in the Geipert apparatus, B., 1124.
- Koehler, *W.*, galvanic deposition of copper and other metals, (P.), B., 506.
- Köhler-Hollander, *L.*, crystalline erythro-dextrin, A., 133.
- Koehn, *C. J., jun.* See *Elvehjem, C. A.*
- Köhring, *P.*, assay of silver residues, B., 636.
- Kölbel, *H.* See *Neunhoeffer, O.*
- Kölbl, *W.* See *Pauli, W.*
- Koelitz, *E.* See *Abderhalden, E.*
- Koelsch, *C. F.*, and *Richter, H. J.*, synthesis of bis-2:2'-(1:3-diphenylinden-3-ol), A., 1492.
- Koenders, *J. W.* See *Dow Chem. Co.*
- Koenig, *E. W.*, determination of alkalis in felspars, A., 1338.
- Koenig, *F. O.*, families of thermodynamic equations. I. Transformations by the characteristic group, A., 301. Effect of mechanical agitation on electrode potential, A., 826.
- Koenig, *K.* See *Schlubach, H. H.*
- Koenig, *M. C.*, *Kramer, M. M.*, and *Payne, L. F.*, vitamin-A content of eggs as related to rate of production, A., 1545.
- Koenig, *P.*, chemical and physical differences between strong and mild tobacco, B., 877.
- König, *W.*, chemistry of [photographic] sensitizers, B., 574. and *Seifert, K.*, vinylene homologues of "Miehler's hydrol-blue," A., 209.
- Königfeld, *G.* See *Küntzel, A.*
- Koenigs, *E.*, and *Loesch, (Frl.) M. von*, 2-methyl-4-quinolyldiazines, A., 989.
- Königsfeldt, *J. M. L. von*. See *Böesecken, J.*
- Koepfli, *J. B.* See *Thimann, K. V.*
- Koepp & Co., *Chemische Fabrik, A.-G., R.*, concentration of formic acid, (P.), B., 619.
- Köppl, *F.* See *Kohlrausch, K. W. F.*
- Körber, *F.*, qualities of heat-resistant steels, B., 26. Oxide inclusions in steel, B., 360. and *Oelsen, W.*, reaction of carbon dissolved in liquid iron with oxides, A., 1090.
- Körber, *H.*, coagulation process [in milk], B., 873. Effect of ultra-short waves on *Streptococcus cremoris*, B., 873.
- Körbler, *J.*, alleviation of pain in cancer by snake venom, A., 515.
- Körner, *M.* See *Nagel, W.*
- Körner, *H.*, preparation of Rochelle salt crystals to give reproducible measurements, A., 813.
- Körösy, *F.* See *Brody, I.*
- Körpeth, *H.* See *Schmid, L.*
- Köster, *A.*, determination of artificial ash in flour, B., 377.
- Köster, *Hans*, constitution of the methyl-ionones, A., 1240.
- Köster, *Heinrich*, and *Bersin, T.*, phosphatase of pig's kidney, A., 534. See also *Bersin, T.*
- Köster, *W.*, system iron-nickel-molybdenum, A., 23. Changes produced by heat-treatment in properties of irreversible ternary iron alloys, B., 727. and *Geller, W.*, system cobalt-iron-titanium, A., 926. System iron-cobalt-tin, A., 1066.
- Koestler, *G.*, colloidal aspects of cheese, B., 427.
- Köszegi, *D.*, and *Tomori, N.*, volumetric determination of iodine in mercury compounds; evaluation of reagents containing $[HgI_4]'$, A., 595.

- Koets, P., complex coacervation of amylophosphoric acid and proteins and the problem of amylopectin, A., 446.
- Koetschau, R., extinction coefficients of mineral lubricating oils, B., 133. Colour depth and colour type of petroleum products, B., 1030.
- Köttgen, P., is p_H in all cases a practical criterion for judging reaction relationships of soils? B., 513.
- Koetz, J. L. See Selden Co.
- Kötzing, K., spasm-alleviating action of octin in lead poisoning, A., 399.
- Kofler, L., and Herrenschwand, G. von, determination of essential oils in drugs; oil content of peppermint, sage, fennel, and caraway, B., 1068.
- and Schaper, E., micro-phytosteryl acetate test, B., 596.
- Kofman, T., morphological reactions in saline and protein solutions, A., 674.
- Kogan, G. L. See Shicharevitch, S. A.
- Kogan, S. See Schettler, I.
- Kogerman, P. N., additive reactions and polymerisation of β -dimethylbutadiene, A., 470. Estonian oil shales and their application in industrial furnaces, B., 483. Pyrolysis of kerogen of shale at various temperatures, B., 1028.
- Kogon, M. See Beresovskaja, F.
- Kohl, H. See Bürger, M.
- Kohler, D. See Lévy, J.
- Kohler, E. P., and Bickel, C. L., β -oxanols [β -oxidopropan- α -ols], A., 984.
- and Blanchard, L. W., jun., steric hindrance in compounds of mesitylene and triphenylbenzene, A., 493.
- and Kable, J., fulvenes in ionone series, A., 203. Diels-Alder reaction in the fulveno series, A., 852.
- and Larsen, R. G., unsaturated sulphur compounds. II. $\alpha\beta$ -Unsaturated ketosulphones, A., 1241.
- and Potter, H., unsaturated sulphur compounds. I. $\alpha\beta$ -Unsaturated sulphones, A., 1115.
- and Tishler, M., reaction between organic magnesium compounds and α -bromoketones. II., A., 493.
- Walker, J. T., and Tishler, M., resolution of an allenic compound, A., 1363.
- Kohler, H., lubricating qualities and cementing power of tars and their influence on design of tar-sand carpets, B., 54.
- Kohler, M., magnetic resistance variation of metal crystals, A., 1063.
- Kohler, R. See Hellmers, J. H.
- Kohler & Chase. See Thomsen, A. M.
- Kohlmeier, E. J. See Grassmann, K.
- Kohlrausch, K. W. F., Raman effect. XLI. Transition from vibrational spectra of XY, to those of XZ, A., 681. Raman effect and problems of constitution. VIII. Symmetry of the naphthalene molecule, A., 853. Raman spectrum and symmetry of the benzene molecule, A., 1301.
- and Köppl, F., Raman effect. XXXVIII. Raman spectrum of organic substances; isomeric paraffin derivatives. V., A., 428.
- and Pongratz, A., Raman effect. XXXVI. Raman spectrum of organic substances (poly-substituted benzenes. V.). XXXVII. Raman spectra of molecules of the type XCOY. XXXIX. Polysubstituted benzenes. V., A., 146, 428.
- Kohlrausch, K. W. F., and Seka, R., Raman effect and problems of constitution. VII. cycloHexadiene (dihydrobenzene), A., 611.
- and Stoekmair, W., Raman effect. XLIV. Raman effect and free rotation. III., A., 1190.
- and Ypsilanti, (Gross-Prinz), Raman effect. XLIII. Raman effect and free rotation. II., A., 1190.
- Kohls, H. L., paraffin [wax] for overwintering storage of sugar beet, B., 166.
- Kohlschütter, H. W., chemistry of solid surfaces. II. Rate of adsorption of hydrogen and deuterium on chromic oxide, A., 27. Active chromic oxide, A., 51.
- Kohlschütter, V., "somatoid" elements of structure in electrolytic metal deposits, B., 997.
- Kohman, E. F., organic acids and the acid-base relationship: oxalic acid, A., 392.
- and Sanborn, N. H., are soluble constituents extracted from vegetables in the blanching process? B., 250. Calcium availability in foods containing oxalates, B., 747.
- Kohn, H. I. See French, C. S.
- Kohn, H. L., inhibition of photosynthesis in *Chlorella pyrenoidosa* by the iodoacetyl radical, A., 1547.
- Kohorn, O. See under Kohorn & Co., O.
- Kohorn & Co., O., and Brandes, R., accelerated preliminary maturing of alkali-cellulose, (P.), B., 986.
- Koidzumi, K. See Kato, Yōgorō.
- Koidzumi, S., anodic behaviour of alcohols in alkaline solutions, A., 937.
- Koike, M., and Tosawa, Y., fate of conjugated glycuronic acids in the body, A., 1151.
- Kojalovitch, N. B. See Jakimov, P. A.
- Kojima, K., K-absorption edges of cobalt and its compounds, A., 908.
- Kok, J. A. F., removal of metals from foodstuffs, B., 571.
- Kokas, E. von, and Ludány, G. von, villikin, A., 410. Hormonal control of the motion of the intestinal villi. II. Villikin, A., 410.
- Kolaczowska, M., and Urbański, T., X-ray studies of products of nitration of starch. I., A., 1061.
- Kolarov, N. See Balarev, D.
- Kolb, H. See Birckenbach, L.
- Kolbach, P., modification of malt-protein, B., 424. [Barley- and malt-] protein question, B., 779.
- Haussmann, G., and Wilharm, G., influence of biological acidification on composition of wort and beer, B., 871.
- and Schild, E., influence of water content and temperature on chemical changes in malt during kilning, B., 649.
- Kolbél, H. See Fischer, F.
- Kold-Hold Manufacturing Co. See Finch, W. G.
- Koldaev, B. M., influence of training on the change in synthetic powers of muscle after work, A., 1521.
- Kolesnik, M. L., citric acid content of *Nicotiana rustica*, A., 1550.
- Kolesnikov, A. F. See Davidson, N. N.
- Koliakova, G. E. See Sokolov, S. I.
- Kolin, A., preparation of photon counters for visible light, A., 1217.
- Kolitowska, J. H., products of hydrolysis of P_2I_4 , and preparation of hypophosphoric acid from it, A., 715.
- Kolke, F., durability of paints containing chlorinated rubber, B., 1004.
- Kolkens, K. See Zerbe, C.
- Kollath, R., production of protons by bombardment of palladium with electrons, A., 677.
- Koller, G., and Hamburg, H., constitution of diploschistessic acid, A., 748. Constituent of *Pertusaria dealbata*, Ach., Nyl., A., 1042.
- and Klein, A., saxatilis acid, A., 218.
- and Maass, W., constituent of *Bcomyces roseus*, Pers., A., 1432.
- Koller, J. P. See Breyer, F. G.
- Kolmer, J. A., new antigens for the Kolmer modification of the Wassermann test, A., 1395.
- See also Schamberg, J. F.
- Kolnitz, H. von, and Remington, R. E., chemistry of normal human thyroids, A., 511.
- Kolodkina, L. A., and Nechaeva, N. N., oxidation of sulphur dioxide in a high-voltage arc discharge, A., 712.
- Kologrivova, V. See Kulikov, V.
- Kolosova, I. See Volodarski, A.
- Koltes, J. See Weiss, R.
- Kolthoff, I. M., formation and properties of precipitates; theory of co-precipitation. IV.-VI., A., 26. Extremely small concentrations and the law of mass action; ionic theory, A., 702, 1076. Acidimetric titration of p -hydroxybenzoic acid alone and in presence of acetic acid, A., 998.
- and Livingston, R. S., catalytic and induced reactions in microchemistry, A., 1084.
- and Rosenblum, C., structural changes taking place during ageing of freshly-formed precipitates. III. Mechanism of ageing of lead sulphate precipitated at room temperature. IV. Ageing of fresh lead sulphate at room temperature in the air-dried state, and of precipitates covered with an adsorbed layer of wool-violet, A., 715.
- and Stenger, V. A., calcium hypochlorite as a volumetric oxidising agent; stability and standardisation of the solution; determination of ammonia, A., 595.
- and Tomsicek, W. J., fourth ionisation constant of ferrocyanic acid, A., 1460. Oxidation potential of the system potassium ferrocyanide-potassium ferricyanide at various ionic strengths, A., 1462.
- See also Sandell, E. B., and Stenger, V. A.
- Koltuipin, S. G. See Nikolaev, N. S.
- Koluscheva, A. See Balarev, D.
- Komar, A., and Lasarev, B. G., linear velocity of transformation of white into grey tin, A., 1311.
- Komar, N. P., Alexandrov, N. I., and Minakov, V. A., determination of benzene in the air of coke, B., 707.
- Ljubimov, P. E., and Minakov, V. A., determination of glyceryl nitrate vapour in air, B., 47.
- and Maevskaja, V. P., determination of carbon disulphide in air, B., 47.
- Sergunin, N. A., and Fainberg, P. B., determination of alcohol and ether vapours in air, B., 47.
- Komárak, K., polarographic studies with the dropping mercury cathode. LIII. Electro-reduction of ferric-mannitol complexes in alkaline solutions, A., 1462.

- Komarek, G., and Berwind Fuel Co. of Delaware, coking of coal, (P.), B., 9. Apparatus for carbonisation and distillation of solid hydrocarbons, (P.), B., 1082.
- Komarevsky, V. I. See Ipatiev, V. N.
- Komarowsky, W., Johnstone, W., and Yoder, P., catalytic dehydration of butyl alcohols, A., 192.
See also Hess, K.
- Komarov, E. V., spectrographic determination of chromium in optical glass, B., 803.
- Komarov, F. P. See Nikitin, N. I.
- Komarov, S. A., isolation of mucosin-sulphuric acid from canine gastric juice, A., 773.
- Komarovsky, A. S., and Poluektov, N. S., sensitive drop reaction for copper, A., 186. Sensitive drop reaction for indium, A., 318. Detection of small quantities of germanium with a drop reaction, A., 1095.
- Komatsu, S., Hibino, T., and Yamaguchi, Saburo, proteins. XIV. Action of superheated water on glycinin from soya beans, A., 638.
- Komatsubara, H. See Hirata, H.
- Komendantova, A. L. See Simnitzki, V. S.
- Komet Kompagnie für Optik, Mechanik, & Elektro-Technik G.m.b.H., generation of foam for fire extinction, (P.), B., 434. Generation of [air] foam, (P.), B., 611.
- Komlev, L. V., origin of radium in oil-field waters, A., 190.
- Myatelin, P., and Savchenko, V., radioactivity of waters from oil-fields of Dagestan, Kuban, and Azerbaidjan, A., 190.
- Komissarov, J. F. See Kretov, A. E.
- Komm, E., and Schlüter, T., baking of bread, (P.), B., 748.
- Kommonen, H., determining technical value of Finnish peat fibres for preparing paper or pulp, B., 489.
- Komori, S. See Ueno, Sei-ichi.
- Komp, W. H. W., and Clark, H. C., observations in Panama with reference to control with atabrin. I. Malaria control with atabrin, A., 1149.
- Kompanski, D. I. See Laschtschenko, P. N.
- Komppa, G., ledum camphor and the constitution of the ledenes, A., 866. Synthesis of 2-methyldicyclo-[1:2:2]-heptan-3-one, A., 979. Complete synthesis of dicyclo-[2:2:2]-octanone and dicyclo-[2:2:2]-octane, A., 1123. Pine oil from a Finnish pine, B., 701.
- and Beckmann, S., *dl*-fenchyl alcohol, A., 349.
- and Nyman, G. A., Wagner transformation with tertiary alcohols; *tert*-2-methylsantenol, A., 865. Tertiary 2:4-dimethylsantenol and 1:4-dimethylsantene, A., 983.
- Kon, G. A. R., uzarigenin, A., 218.
See also Gamble, D. J. C.
- Kon, S. K., and Henry, K. M., effect of feeding cacao shell to cows on vitamin-D content of butter, A., 1287.
See also Booth, R. G., and Dann, W. J.
- Konarzewski, J., and Rusiecki, S., relation between refractoriness under load of grog fireclay bricks and size of the grains of grog in the mass, B., 307.
- Kondo, H., and Keimatsu, I., constitution of phaeanthine, A., 1256.
- Narita, Z., and Uyeo, S., alkaloids of *Sinomenium* and *Cocculus*. XXXIX. Constitution of dauricine, A., 637.
- Kondo, H., Ochiai, E., and Tsuda, K., constitution of matrine. XVII., A., 1514.
- Ochiai, E., Tsuda, K., and Yoshida, S., Constitution of matrine. XV. Products of the distillation of potassium matrate with soda-lime, A., 766.
- and Tsuda, K., constitution of matrine. XVI. Dehydrogenation of matrine, A., 766.
- and Uyeo, S., *Lycoris* alkaloids. IX. 6:7-Methylenedioxy-N-methylphenanthridone as product of degradation of lycorine, A., 1387.
- Kondō, M., and Okamura, T., storage of hulled rice in airtight containers and in carbon dioxide to ascertain relationship between quality changes and water content, B., 171. Quality of hulled rice stored for several years in straw bags, B., 171. Storage of rice. XI. Hoshii stored, hermetically sealed, for 23 years on a mountain. XII. and XIII. Storage of rice in tin containers with calcium chloride, with special reference to the underdried product, B., 377, 1065. Hoshii stored airtight for 23 years, B., 520.
- Kondo, S., and Suzuki, Shinichi, salt glaze. II. Action of mixed vapour of water and sodium chloride on alumina, ferric oxide, feldspar, kaolin, and synthetic body; treatment of waste gases. III. Sodium silicate. IV. Microscopical observation of commercial salt-glazed wares. V. Slip glaze, B., 187. Resistance [of ceramic materials] to softening under load at high temperatures, B., 591.
- Kondoguri, V. V. See Burkser, E. S.
- Kondratiev, E. F., and Kutuev, S. K., refining of peat oil with alcohol, B., 211.
- and Vener, I. M., iron humate, B., 402.
- Kondratiev, V., and Lauris, A., induced predissociation of the Te_2 molecule, A., 272.
See also Robinov, M.
- Konek, F., and Rupe, H., influence of substituents on solubility of salts (especially nitrates) of secondary aromatic bases, A., 1488.
- Konemovich, P. E., and Novik-Bam, E. Z., analysis of fat emulsions containing sulphonaphthene acids, B., 416.
- Konheim, H. S. See Albersheim, W. J.
- Konikov, W. See Levene, G.
- Koning, (Miss) H. C. See Baas-Becking, L. G. M.
- Konisi, Y., crêpes. II.—IV., and VI., B., 16, 183, 221, 488. Dyeing. I. Change in dye concentration in the dyebath, B., 492.
- Konkova, V. A. See Ushakov, S. N.
- Kono, M., and Maruyama, R., coccids of Japan. VIII. Nitrogenous compounds and mineral constituents of *Iceria purchasi*, Mask, A., 1398.
- Konobejevski, S., theory of supercooled solid solutions, A., 24.
- Konomi, T., relation of adrenal cortex to carbohydrate metabolism, A., 1530.
- Kononova, M. M., soil organic matter, B., 198.
See also Tiurin, I. V.
- Konopicky, K., sintered magnesite and refractory materials containing it, (P.), B., 993.
See also Stauffer, R.
- Konopinski, E. J., and Uhlenbeck, G. E., Fermi theory of β -radioactivity, A., 1048.
- Konov, V. See Rapoport, I. B.
- Konovalevko, P., sulphiting pine bark under conditions of tannery-extraction procedure, B., 686.
- Konovaleva, B. A., catalysis of hydrogen peroxide decomposition by ferrous sulphate and sodium tungstate, A., 454.
- Konovaleva, R., and Orekhov, A., harmine and harmaline series. II. Nitro- and amino-derivatives of harmine and harmaline; O-alkyl ethers of harmol and harmolol, A., 765.
See also Orekhov, A.
- Konsehak, M. See Rimarski, W.
- Konsta, A. See Christopoulos, T.
- Konstantin-Hansen, B. See Pedersen-Bjergaard, K.
- Konstantinova, V. P., rigidity with which two solid phases adhere along their interface, A., 1071.
- Konsuloff, S., melanophoric hormone in colostrum, A., 126. Melanophore hormone in urine, A., 791.
- Kontorova, T. See Frenkel, J.
- Koo, E. C., evaluation of oil shale from Szechuan, B., 259.
- Koolhaas, D. R. See Rowaan, P. A.
- Koons, G. I. See Merritt, M. H.
- Koontz, P. G., spectrum of Ag_2A , A., 1183.
- Kooy, R., behaviour of adrenalectomised rats with and without cortin in a running-wheel, A., 539.
- Kopaczewski, W., gelatinisation of proteins by acids, A., 300. Gelification of human serum by acids, A., 374. Serum gelation and animal species, A., 508. Formation of gels in normal human serum by addition of lactic acid, A., 508. Formation in syphilitic sera, A., 508. Colloidal nature of anaphylactic precipitates, A., 644. Surface tensions of carcinogenic substances, A., 649.
- Kopelevitch, G. V., Brodovitsch, A. I., and Faingold, S. G., removal of naphthalene from coke-oven gas, B., 1080.
- Brodovitsch, A. I., and Hecht, I. R., recovery of thiophen-free benzol, B., 1081.
- Kopeliovitch, I. A. See Aronov, S. G.
- Koperina, A., adsorption of nicotine by solid adsorbents from a stream of air, B., 45. Utilisation of products of dry distillation of tobacco stems and *Nicotiana rustica* dust, B., 1164.
- and Shageeva, A., transfer of nicotine into smoke for different conditions of burning "makhorka" and "makhorka" dust (a Russian inferior tobacco), B., 45.
- Kopetz, L., graphical or numerical evaluation of farinograms, B., 1018.
- Kopfermann, H., and Rasmussen, E., nuclear moment of scandium, A., 2. Mechanical moment of the cobalt nucleus, A., 675.
See also Fuchs, B.
- Koppanyi, T., and Dille, J. M., distribution of barbiturates in brain, A., 1019.
- Dille, J. M., and Krop, S., barbiturates. VIII. Distribution in the brain, A., 118.
- Dille, J. M., Murphy, W. S., and Krop, S., barbiturates. II. Methods of barbital research, A., 245.
- Linegar, C. R., and Dille, J. M., barbiturates. XII. Distribution. XIII. Duration of action, A., 1411.
- Murphy, W. S., and Krop, S., barbiturates. X. Acute barbital poisoning in dehydration and diuresis, A., 118.

- Koppanyi, T.** See also **Dille, J. M.**
Koppar, L. G. See **Desai, R. D.**
Koppenhöfer, G. F., iodine content of the human pituitary, A., 377, 511. Pathogenesis of silicotic tissue changes. II. Behaviour of quartz dust in silicotic tissue. III. Nature of asbestosis particles, A., 1022.
Koppenhoeff, R., and **Highberger, J. H.**, grease stains on [vegetable-tanned] leather. III. Lipins of fresh steer hide, B., 114.
Koppers Co. of Delaware, coking retort ovens, (P.), B., 981.
 and **Becker, Joseph**, coking retort ovens, (P.), B., 981.
Blackwood, O. H., and **Exline, P. G.**, apparatus for manufacturing water-gas, (P.), B., 9.
 and **Désy, G. G.**, refining a benzenoid hydrocarbon oil, (P.), B., 294.
 and **Donauer, M.**, manufacture and separation of thiourea from ammonium thiocyanate, (P.), B., 92.
 and **Eymann, C.**, conversion of gases or gas mixtures at high temperatures, (P.), B., 85. Removal of hydrogen sulphide from gases, (P.), B., 88.
 and **Fidelity Trust Co.**, treatment of ammonia liquor for separation of impurities or other constituents therefrom, (P.), B., 662.
 and **Garrison, C. W.**, purification of [hydrocarbon] oil, (P.), B., 713.
 and **Gollmar, H. A.**, gas purification, (P.), B., 294. Gas-purification and recovery of by-products therefrom, (P.), B., 758.
 and **Hahn, C.**, coke-oven battery, (P.), B., 792.
 and **Hansen, C. J.**, removal of hydrogen sulphide and ammonia from gases, (P.), B., 214, 983. Fertiliser containing phosphorus, nitrogen, and potassium compounds, (P.), B., 327. Ammonium sulphate, (P.), B., 672. Fertiliser, (P.), B., 919.
Hansen, C. J., and **Eymann, C.**, removal of carbon disulphide from gases, (P.), B., 891.
 and **Hiller, G.**, ammonium sulphate, (P.), B., 672.
 and **Ingram, J. W.**, refining of hydrocarbon oils, (P.), B., 713.
 and **Jones, I. H.**, treating wash-oil, (P.), B., 56. Purification of coal-distillation gas by-products, (P.), B., 758.
 and **Lux, E.**, refractory bricks, etc., from chrome ore, (P.), B., 631. Cement for acid-proof brickwork, (P.), B., 950.
 and **Nordmeyer, G. J.**, carburetted water-gas, (P.), B., 134. Coke and gas manufacture, (P.), B., 615.
 and **Peterson, P. D.**, wettable sulphur composition, (P.), B., 648.
 and **Powell, Alfred R.**, treatment of coke, (P.), B., 537.
 and **Ramsburg, C. J.**, coking heavy petroleum oil, (P.), B., 712.
 and **Shaw, J. A.**, treatment of liquids; [removal of tar acids from tar], (P.), B., 294. Treatment of liquid containing tar acid, (P.), B., 294. Dewatering of coal sludge, (P.), B., 1082.
 and **Shoeld, M.**, purification and separation of gaseous mixtures, (P.), B., 583.
 and **Smith, C. J.**, purification of liquids [waste waters], (P.), B., 432.
Koppers Co. of Delaware, and **Sperr, F. W.**, jun., sealing medium for gas holders, (P.), B., 439. Gas purification, (P.), B., 440. Quenching of hot coke, (P.), B., 615.
 and **Totzek, F.**, compound regenerative coke oven, (P.), B., 293. Heat-exchanger, (P.), B., 337.
 and **Van Ackeren, J.**, coking retort ovens, (P.), B., 439. Coke-oven apparatus, (P.), B., 792.
 and **Van Ackeren, P.**, safety device for [gas] producers, etc., (P.), B., 217.
 and **Wilson, P. J.**, jun., treatment of gas, (P.), B., 537.
Koppers Ges.m.b.H., **H.**, and **Fitz, W.**, continuously-operated vertical chamber ovens or retorts, (P.), B., 212.
Koppers-Rheolaveur Co. See **Keatley, C. W.**
Kopsch, U. See **Walker, W. O.**
Koptchenova, E. V., lacustrine and bog-ores of the Kouch Lake and Sego Lake regions of the Karelian A.S.S.R., A., 1346.
 See also **Arehangel'ski, A. D.**
Korab, S. I., and **Shaposhnik, I. P.**, toxicity [to caterpillars] of sodium fluoride and sodium silicofluoride, B., 423.
Korabelnik, R. K. See **Pisarshevski, L. V.**
Korach, M. See **Fuschi, G.**
Koralkov, S. I., addition of active carbon in the [sugar-juice] evaporators, B., 1063.
Korany, J. A., and **Bliss, E. M.**, prevention of corrosion in gas condensers, B., 1047.
Korczewski, M., and **Majewski, F.**, relative nutrient values [for plants] of sodium and potassium, B., 967.
Majewski, F., and **Wafflard, J.**, influence of potassium on growth of plants in different stages of development. II. Absorption of potassium and sodium by plants and dry-matter production, B., 966.
Kordatzki, W. See **Wulff, P.**
Kordes, E., dissociation vapour pressure of sulphides and their order of deposition in magmatic ore deposits, A., 727.
Kordon, R. Y., quince, A., 1432.
Korenchevsky, V., effects produced on rats by synthetic androsterone (male sex hormone), A., 667.
 and **Dennison, M.**, assay of crystalline male sexual hormone (androsterone), A., 1174. Assay of fat-soluble androsteronediol, A., 1427.
Dennison, M., and **Simpson, S. L.**, effects of water-soluble preparations of androsterone and androsteronediol on castrated rats, A., 1426. Assay of the gonadotropic hormone of pregnancy urine on male rats, A., 1545. Prolonged treatment of male and female rats with androsterone and its derivatives, alone or together with oestrone, A., 1545.
Korenman, I. M., sensitivity of the starch-iodine reaction, A., 183. Microchemical detection of mercury, A., 318. Reactions of potassium iodide and bases with salts of lead, bismuth, mercury, copper, cadmium, and antimony, A., 720. Microiodometric determinations, A., 1091. Use of indigo-carmine in micro-volumetric analysis, A., 1095. Detection of ferri-cyanides in the presence of ferrocyanides, A., 1095.
Korentzvit, A., agar from Black Sea *Phyllophora*, B., 828. Technology of agar-agar, B., 1068.
Koriakina, A. F. See **Danilov, A.**, and **Krestovnikov, A. N.**
Korinek, J., manuring of newly cultivated soils. VII. Austria, B., 515.
Koritnig, O. T., steam pressure in milk-heating and the evaporation of whey, B., 873.
Korkhov, I. A. See **Perelman, S. S.**
Korman, S. See **La Mer, V. K.**
Korn, R., and **Boerner, C.**, determining twisting of cable papers with the Schop-per torsion tester, B., 143.
Kornevich, K. F. See **Hoffman, M. F.**
Kornfeld, A., importance of potassium for soya beans, B., 245.
Kornfeld, G., photochemical decomposition of hydrogen peroxide in aqueous solution, A., 1087.
 and **McCaig, M.**, absorption spectrum of sulphur monoxide, A., 280.
Kornfeld, M., anisotropy in velocity of growth of new grains on recrystallisation, A., 433. Formation of nuclei in recrystallisation. I. Dependence of incubation period on the deformation and heating conditions, A., 1307. Structure of a deformed crystal and recovery phenomena, A., 1311. Weakening of a deformed single crystal by annealing, A., 1062.
 and **Pavlov, V.**, effect of annealing on recrystallisation of deformed aluminium wire, B., 1049.
Kornilov, I. I. See **Stepanov, N. I.**
Kornmann, P., osmometer from living *Valonia* cells and their application in permeability determinations, A., 674. Inhibition of the action of growth-substance by parts of living plants, A., 1038.
Korobov, N. See **Rajchinshtein, C.**
Korol, S. S., and **Kalushskaja, V. M.**, rapid determination of silica in water-glass, B., 60.
Korosy, F., preparation for regulating degree of acidity of gastric juice, (P.), B., 750.
Koroteev, T. I., influence of η_H during tanning and of concentration on fixation of tannides from sulphite-cellulose extracts, B., 419.
Korotkiy, B. See **Weidenhagen, R.**
Korotshchikina, E. A. See **Litvinov, N. D.**
Korovatzki, E. F., cracking the condensate from the Winkler-Koch unit in comparison with cracking straight-run distillate, B., 131.
 and **Frolova, Z. F.**, efficiency of cracking in the high-pressure coil of the Winkler-Koch cracking unit, B., 131.
Korpiun, J., determination of protective value and strength of galvanic coatings, B., 595.
Korr, I. M., reducing intensity of luminous bacteria in presence of agents affecting oxidations, A., 1419.
Korsakova, M. P., reduction of hyposulphite by yeasts, A., 124. Review of work on root-nodule bacteria, B., 164.
Korschán, H., and **Maurer, E.**, influence of forging and dimensions of heat-treated test-pieces on mechanical properties of structural steel, B., 905.
 See also **Houdremont, B.**
Korschár, V. See **Schorigin, P. P.**
Korscheniovski, G. A., determination of nicotine in tobacco by measuring surface tension, A., 133. Sulpholysis of cellulose, A., 610. Chemical delinting of cottonseed, B., 444.

- Korsheniovski, *G. A.*, and Kaschirin, *S. M.*, tobacco stem as a source of cellulose, B., 1118.
- and Raskina, *R. L.*, production of cellulose from cellulose-bearing materials after pretreatment of the raw materials with nitric acid, B., 445.
- and Reked, *I. N.*, determination of citric acid in tobacco, B., 1118.
- See also Sakostschikov, *A. P.*, and Schmuck, *A.*
- Korshev, *P. P.*, and Rossinskaja, *I. M.*, concentration of formaldehyde solutions, B., 1084.
- Korshunov, *I. A.*, preparation of mercuric oxide, B., 723.
- Korsunski, *M. I.*, deviations from the Sommerfeld formula for the *K* levels, A., 908. Mass defect in the heavy elements, A., 911.
- Kortschemkin, *F. I.*, elimination of iron from zinc chloride solutions, B., 947.
- and Pomortzev, *M. E.*, influence of separate factors on parchmentisation and properties of paperboard, B., 667. Parchmentising and the properties of vulcanised fibre during its production, B., 1040.
- Kortüm, *G.*, and Halban, *H. von*, photoelectric measurement of relative and absolute extinction, A., 9.
- See also Halban, *H. von*.
- Koruitov, *S. I.* See Smirnov, *D. N.*
- Korvezee, *A. E.* See Hoeflake, *J. M. A.*
- Korzhenevskaja, *E. S.*, petrographical investigation of coal deposits of the Borovichi district, A., 61.
- Korzheniovski. See under Korsheniovski.
- Kosaka, *Y.*, Toda, *H.*, and Kitagawa, *C.*, fusibility of coal ash. III. Fusibility of Japanese coal ashes in an oxidising atmosphere. IV. Fusibility of Japanese coal ashes in a reducing atmosphere, B., 258.
- Kosaki, *T.* See Horiba, *S.*
- Kosaki, *Y.* See Nagai, *S.*
- Koschany, *W.* See Jablczynski, *K.*
- Koschara, *W.*, action of light on lyochromes, A., 235. Urinary lyochromes, A., 774.
- See also Asta *A.-G. Chem. Fabr.*
- Koscharni, *V. A.*, preparation of emulsions, B., 732.
- Koschkin, *M. L.*, and Spector, *E. M.*, significance of ammonia in the chlorine-consuming capacity of water. IV. Influence of light and temperature on chlorination of pre-ammonised water, B., 608.
- Koschkin, *N. V.* See Tschitschenko, *V. E.*
- Koschojan, *C.*, and Rjabinskaja, *A.*, physiology of skeletal muscle of mammals at different stages of their individual development, A., 1265.
- Koschuchova, *M. A.* See Paksin, *I. N.*
- Koshenova, *K. T.* See Kamzolkin, *V. P.*
- Kositzuin, *D. I.* See Solodovnikov, *P. A.*
- Koskowschi, *W.* See Dadlez, *J.*
- Koskull, *H. von*. See Hägglund, *E.*
- Koslovski, *M. T.*, and Panner, *A. J.*, micro-chemical detection of hydrogen cyanide, A., 54.
- Kosłowska, *A.*, influence of plants on pH in the medium, A., 132.
- Kosmin, *N. P.*, ageing of wheat flour and the nature of the process, B., 697.
- and Alakrinskaja, *K. A.*, determination of acidity factor of [wheat]-flour fat for evaluating age of flours, B., 520. Gas retention of doughs of different gluten content, B., 570.
- Kosmin, *N. P.*, and Popzova, *A. I.*, gliadin-glutenin ratio in [wheat] gluten of various qualities, B., 204.
- Kosmortov, *V. A.* See Danini, *E. M.*
- Kosobe, *S.* See Yoshimura, *R.*
- Kosodaev, *M. S.* See Alichanov, *A. I.*
- Kosolapov, *G. F.*, and Trapeznikov, *A. K.*, X-ray analysis of binary metallic alloys at higher temperatures, A., 1065.
- Kosolapov, *Z. E.*, dehydration of ethyl alcohol by mixed catalysts, A., 1104.
- Koss, *A.*, titre of solid fats and their mixtures, B., 683.
- Kossel, *W.*, energetics of surface phenomena, A., 161. [Law of Thomson and Gibbs: vapour pressure of small particles], A., 925.
- Loeck, *V.*, and Voges, *H.*, directional distribution of characteristic X-rays emitted within crystals, A., 685.
- and Voges, *H.*, X-ray interference at the single-crystal anti-cathode, A., 1306.
- Kossendey, *F.* See Zwieg, *W.*
- Kossiakoff, *A.* See Noyes, *A. A.*
- Kossovitch, *N.*, application of the Ramon method to the titration of antibacterial sera, A., 408.
- See also De la Rivière, *R. D.*
- Kosovskaja, *E.* See Danilov, *A.*, and Krestovnikov, *A.*
- Kostelitz, *O.*, active oxides. LXXXIII. Systems zinc oxide-chromic oxide and cupric oxide-chromic oxide as catalysts of decomposition of methyl alcohol, A., 175.
- Kostenko, *A. S.*, and Shimanovich, *S. B.*, interaction of iron and chromium salts with collagen in combined chromium-iron tanning, B., 419.
- Koster, *J.* See Dean, *R. S.*
- Kosterlitz, *H.*, relationship of blood-sugar level to systemic blood-pressure, A., 770.
- See also Bell, *D. J.*
- Kostermans, *D. G. F. R.* See Kögl, *F.*
- Kostina, *T. Z.* See Kurtschatov, *I. V.*
- Kostkiewicz, *B.* See Karp, *L.*
- Kostrikin, *Y. M.*, and Prokhorov, *F. E.*, softening water with hydrogen-permutit, B., 1.
- Kostuitschev, *S.*, and Berg, *V.*, semi-plant production of citric acid, B., 872.
- Kosuge, *Y.*, reaction of the blood-vessels. I. Electrical stimulation. II. Influence of medicaments on electrical excitation. III. Influence of nerve or muscle poisons on electrical excitation. IV. Influence of paralysing drugs on electrical excitation. V. Influence of stimulative drugs on electrical excitation, A., 1018.
- Kosuzi, *T.*, Umeda, *K.*, Lee, *E.*, Tachibana, *S.*, and Lee, *C.*, iron metabolism. III, A., 243.
- Kotake, *M.* See Yokoyama, *M.*
- Kotake, *Y.* See Hoshino, *T.*
- Kothari, *D. S.*, and Saha, *N. K.*, latent heat of condensation of metals, A., 1454.
- See also Gogate, *D. V.*
- Kotljär, *J. C.*, modification of Kjeldahl-Pregl method of determining nitrogen, and its application to conserves, B., 331. Determination of aluminium in conserves, B., 1021.
- Kotljarov, *P. I.*, modern dry gas cleaning, B., 1124.
- Kotnitzki, *A. I.*, determination of citric acid in *Nicotiana rustica*, B., 1164. Accelerated carbide-manometric method for determining moisture in *Nicotiana rustica*, B., 1164.
- Kotnitzki, *A. I.*, and Bogatirtschuk, *S. V.*, rapid determination of citric acid in tobacco, B., 749. Rapid determination of citric acid in maxorochni tobacco, B., 1118.
- and Lebedeva, *T. A.*, determination of pectic substances in maxorochni tobacco, B., 1118. Adhesive for cigarette wrappers, B., 1155.
- and Unger, *M. V.*, determination of fat in maxorochni seeds from the de-fatted residue, B., 1101.
- Unger, *M. V.*, and Lebedeva, *T. A.*, cryohydrate method of determining hygroscopic water in maxorochni tobacco, B., 1118.
- and Volfenson, *A. M.*, polarimetric determination of nicotine in maxorochni tobacco, B., 1118. Rapid determination of moisture in maxorochni tobacco, B., 1118.
- Kotó, *H.*, crystal structure and crystalline configuration of normal and modified Si-Al alloys, A., 926.
- Koton, *M. M.* See Razuvaiev, *G. A.*
- Kotov, *M.*, synthetic tanning materials for youfte leather, B., 70.
- Kotov, *V.*, accelerated tanning of tawed hides with oak extract, B., 916.
- and Gudakovski, *A.*, stability of oak-bark extract during extraction, and the tanning of semi-raw hides, B., 739.
- Kotovski, *L. K.*, fermenting products of hydrolysis of cellulose by dilute sulphuric acid, B., 824.
- Kotowicz, *A.* See Wasilewski, *L.*
- Kotrba, *J.*, decomposition of permanganic acid in certain acid media; thermal decomposition of manganese carbonate, and its products, A., 1090.
- See also Fischl, *V.*
- Kotreliev, *A. N.* See Zelikov, *I. S.*
- Kotscheschkov, *K. A.*, synthesis of halides of tin alkyls, A., 738. Synthesis of mixed dihalogen derivatives of compounds of tin with aliphatic radicals, A., 967.
- and Nad, *M. M.*, tin *m*-tolyl derivatives, A., 769.
- and Nesmejanov, *A. N.*, replacement of tin, lead, arsenic, and antimony in organic compounds by mercury, A., 506.
- Kotschnev, *N.* See London, *E. S.*
- Kotzebue, *M. H.*, fractionating apparatus, (P.), B., 977.
- Kousmine, *T.*, thermo-electromotive force produced by magnetisation, A., 1063.
- Koutseff, *A.* See Grabar, *P.*
- Kovalenko, *A. G.* See Sherebov, *L. P.*
- Kovalenko, *E. I.*, simplified determination of the Schmuck and polyphenol coefficients [of tobacco], A., 1551.
- See also Piatnitzki, *M. P.*
- Kovalev, *L. K.*, phenomenon of dissociation: accelerating glass-melting, B., 495.
- Kovalev, *T. G.*, and Illarionov, *V. V.*, variation of physical constants of birch-bark tar on protracted exposure to air, B., 708.
- Kovalevski, *I. I.*, surface phenomena in production of paper and cellulose. II. Wetting as a measure of degree of paper sizing, B., 845.
- Kovda, *V. A.*, soils of tobacco regions in U.S.S.R., B., 38. Formation of secondary calcium carbonate in soils, B., 163.
- and Seljakov, *S. N.*, saltpetre solontschak in Middle-Asia, B., 1106.

- Kowalewski, S. See Smoleński, K.
 Kowalski, E. See Haraldsen, H.
 Kowalski, G. See Drees, K.
 Kowarski, L., growth of very thin crystals. I. Qualitative investigation. II. Quantitative study. III. Theoretical, A., 1059.
 See also Joliot, F.
 Koyanagi, H. See Tsujimoto, M.
 Koyanagi, K., alite, B., 675.
 See also Yoshida, U.
 Koyanagi, S., electrolytic deposition of metals from their pyrophosphate solutions, A., 1330.
 Kozák, J. See Hulač, V.
 Kozakevitch, P. P., neutral salt action in non-aqueous solutions, A., 1461. Sulphur content of coals of the Stalino-Makeeva region of the Donetz basin, and the origin of the sulphur, B., 932.
 Kozeschkov, K. A. See Freidlina, R. C.
 Kozima, K. See Mizushima, S.
 Kozlov, P. V., manufacture of cellulose acetate films, B., 540.
 Kozlov, V. N., and Mishin, A. D., content of non-volatile carbon in charcoal in relation to conditions of carbonisation and coking, B., 660.
 Kozłowski, W. See Smoleński, K.
 Kôzu, S., and Takané, K., crystal structure of chalcopyrite, A., 152.
 Kôzu, T., precipitation of aluminium with ammonium hydrogen carbonate, A., 951. Quantitative separation of aluminium from manganese, nickel, cobalt, and zinc, A., 1338.
 Kozuireva, E. I. See Maslov, P. S.
 Kraak, H. H. See Keesom, W. H.
 Kracek, F. C. See Goranson, R. W.
 Kraeber, L., effect of manganese on equilibrium between iron oxides and carbon monoxide and dioxide in thermal decomposition of siderite, B., 230.
 and Boppel, A., action of metallic salts in flotation of oxide minerals, B., 771.
 Kräff, A. A., discoloration of lead paints by hydrogen sulphide, B., 160. Kaufmann's thiocyanogen method for determination of degree of unsaturation and composition of fats [and oils], B., 683. Precipitation of solid driers, B., 860.
 Kraemer, A. See Hüchel, W.
 Kraemer, E. O., and Lansing, W. D., mol. wts. of cellulose and cellulose derivatives, A., 688.
 See also Lansing, W. D., Wilkins, E. S., jun., and Willoughby, C. E.
 Krämer, K. See Schütz, W.
 Krämer, Karl. See Ott, E.
 Kraemer, W., spectral analysis using sensitive lines within the range of glass instruments; measurements in the spark spectrum of a chromium-nickel-carbon special alloy containing sulphur; measurements in the spark spectrum of a cobalt-iron alloy for magnet construction, B., 551, 594.
 Krättschell, B. See Lehmann, E.
 Kraft, G. See Embden, G.
 Kraft, K., the original acids in American pine resin, A., 1372.
 Kraft, Ltd., G., Campbell, John, and Quinn, R. G., manufacture of thermal insulators [asphalt-coated paper], (P.), B., 806.
 Kraft-Phenix Cheese Corporation, concentrated casein, (P.), B., 781. Transparent sheets or coatings [from casein], (P.), B., 1041. Whey concentrates, (P.), B., 1067.
 Kraft-Phenix Cheese Corporation. See also Clickner, F. H.
 Krahll, M., moulding properties of phenolic resins, B., 960.
 Krahll, M. E., and Clowes, G. H. A., cellular oxidative mechanism involved in dinitrophenol stimulation of respiration, A., 395. Action of dinitroresol on yeast fermentation and oxidation, A., 1027. Effects of dinitroresol on oxidation and fermentation, A., 1533.
 Kraini, P. Y. See Adadurov, I. E.
 Krainick, H. See Oesterlin, M.
 Krais, P., and Lüdicke, W., moisture content of raw jute and jute yarns, B., 666.
 Krajčinović, M., chestnut, oak, and quebracho extracts for production of sole leather, B., 281.
 and Cerkovnikov, E., bleaching clay and its suitability for activation, B., 990.
 Krakowski, M., tautomerism of products of condensation of aromatic aldehydes with barbituric acid, A., 759.
 See also Swientoslawski, W.
 Kramer, B. See Sobel, A. E.
 Kramer, E., graphite lubricants, (P.), B., 394. [Colloidal] graphite lubricants, (P.), B., 486. Metallic powders, (P.), B., 956.
 Kramer, G. See Wollschitt, H.
 Kramer, G. A. See Shell Development Co.
 Kramer, J. See Weaver, J. E.
 Kramer, J. (Groningen). See Backer, H. J.
 Kramer, Jacob. See Lehrman, L.
 Kramer, K., continuous measurement of oxygen content of blood flowing through intact vessels, A., 371.
 and Sarre, H., arterialisation of blood. I. Oxygen saturation of blood and respiration during narcosis. II. Equilibrium of oxygen tension between alveoli and blood. III. Gaseous exchange in the lungs during respiratory pauses, A., 371.
 Kramer, M. M., and McCammon, R. B., utilisation of calcium and phosphorus from varied forms of milk and products, B., 331.
 See also Koening, M. C.
 Kramer, S. P., removal of fluorides from water by sand filtration, B., 256.
 Krametz, E. See Dubsky, J. V.
 Krámlí, A. See Bruckner, V.
 Kranick, F. N. C., and Case Co., J. I., hammer mill, (P.), B., 386.
 Krantz, H., carbonisation of fabrics, (P.), B., 186.
 Krantz, J. C., jun., Carr, C. J., and Musser, R., anaesthetic properties of trichloroethylene, A., 1532.
 Evans, W. E., jun., and Carr, C. J., fate of mannide and isomannide in the animal body, A., 1151.
 See also Carr, C. J., Munch, J. C., Oakley, M., and Schmidt, J. E.
 Krantz, M. I., and Bazanov, P. I., economics of production of ammonium sulphate from phosphogypsum, B., 671.
 Kranz, B., heat transfer in evaporators, B., 529.
 Kranz, F. H. See Nat. Aniline & Chem. Co.
 Kranz, W., relations between granulation and baking quality, particularly fermenting [gassing] power, of wheat flours, B., 204. Simplified experimental milling for testing wheat quality, B., 1017.
 Krascheninnikova, V. M. See Platonov, M. S.
 Krase, N. W. See Carlin, J. C., and Singh, A. D.
 Krasikov, S. E. See Grebenschtschikov, I. V., and Karpov, B. G.
 Krasilschikov, B. E. See Mintz, I. B.
 Krasnodebski, J. See Rafalowski, H.
 Krasnokutski, I. M., isolation of vanadium from Ural titanomagnetite basic martensite slag, B., 723.
 Krasnopskaja, E. L. See Schischkin, V. V.
 Krasnovski, O. V., accelerated analysis of glass, B., 405.
 Krasnow, F., cholesterol and lecithin in teeth and saliva, A., 377.
 Krasova, V., analysis of isomerides of dinitrobenzene, B., 296.
 Krassó, T., influence of cathodic hydrogen overvoltage on [tensile] strength of different kinds of steel, A., 171.
 Krassowsky, K., effect of the burning process on the clinker concrete lining of the rotary cement furnace, B., 591.
 Kraszewski, W., condensation of styryl methyl ketone with nitrobenzaldehydes, A., 345.
 Pergamentówna, F., and Blochówna, D., sorbitol in certain Polish fruits and fruit wines, B., 43.
 Kratky, A., hard bodies [sintered carbide alloys], especially for cutting tools, (P.), B., 1148.
 Kratky, O., micellar structure and deformation processes of fibre materials, A., 286.
 Saito, G., and Bierstein, V., deformation of swollen cellulose ester, A., 1202.
 Kratz, E. M., and Marsene Products Co., transparent sheet material, (P.), B., 846.
 Kratz, G. D., and Spencer, W. M., uses of latex in textile finishing, B., 897.
 Kratz, H., jun. See Keefer, C. E.
 Kratzenstein, M., space-charge in molecular-ray experiments, A., 432.
 Kraus, A., behaviour of pigments in cellulose ester lacquers, B., 239. Properties of plasticisers for nitrocellulose lacquers. IV., B., 510. Plasticisers: their influence on the lacquer film, B., 1004.
 Kraus, C. A., properties of electrolytes as related to their constitution, A., 295.
 and Parmenter, E. F., potassium oxides, A., 49.
 and Schmidt, F. C., heats of solution and reaction in liquid ammonia. III., A., 37.
 See also Cox, N. L., Fuoss, R. M., Hooper, G. S., and Johnson, W. C.
 Kraus, C. E. See Boston, O. W.
 Kraus, E. J., vinegar under the quartz lamp, B., 330.
 Kraus, R., determination of sulphuric acid in clouds, as present in burner gases, etc., B., 492.
 Kraus, W., condensation products from urea, formaldehyde, and hexamethylenetetramine, (P.), B., 736. Condensation products [from Novolaks], (P.), B., 915. Condensation products [synthetic resins], (P.), B., 961.
 Krause, A., and Wojciechowski, J., complete regeneration of ammonium chloride lyes, and the cyclic process for production of soda by the Solvay method, B., 145.
 Krause, Alfons, amorphous and crystallised hydrated oxides and oxides. XXI. $\alpha\text{-Fe}_2\text{O}_3\cdot\text{H}_2\text{O}$, goethite or needle ironstone, and the conversion of $\alpha\text{-Fe}_2\text{O}_3\cdot\text{H}_2\text{O}$ into $\alpha\text{-Fe}_2\text{O}_3$. XXII. Hydroxide gels and oxide hydrate gels, and their amphoteric properties, A., 946, 1075.

- Krause, *Alfons* [with *Kemnitz, E.*, *Wyszynski, F.*, and *Sawicki, J.*], amorphous and crystalline oxide hydrates and oxides. XXIII. Formation of ozone during the oxidation of ferric hydroxides and ferric oxides: existence of peroxide compounds of iron, A., 1335.
[with *Świątkowska, W.*, *Torno, H.*, and *Stockówna, J.*], ageing of ferric orthohydroxide, and its conversion into $\alpha\text{-Fe}_2\text{O}_3$ as a phenomenon of discontinuous crystallisation or devitrification, A., 710.
and *Kapitańczyk, K.*, colloidal air, and determination of the size of the particles, A., 295. Colloidal gases. III. Colloidal air and colloidal oxygen with a bubble size of 5 μ or 3 μ diameter, A., 699.
and *Krzyżanski, S.*, microcrystalline ferric hydroxides and sodium, silver, and barium ferrites, A., 314.
and *Skorupska, L.*, structure of the gelatinous ortho-ferric hydroxide obtained by oxidising ferrous carbonate, A., 932.
Krause, A. C., chemical constitution of the cornea, A., 511. Lipins of the sclera, cornea, choroid, and iris, A., 511.
Krause, G. A., and *Ges. f. Linde's Eismaschinen A.-G.*, recovering dry products from liquids such as [heat-sensitive] solutions or emulsions, (P.), B., 482.
See also *Ges. f. Linde's Eismaschinen A.-G.*
Krause, H., brown-coloration processes for copper and copper alloys, B., 27. Blue and black coloration of iron in fused salt baths, B., 633. Coloration of aluminium and its alloys, B., 1146.
Krause, J., protein and nitrogen content of duodenal juice, A., 379.
Krause, J. (München). See *Schwarz, M. von*.
Krause, O., iron oxide in fireclay burning, B., 768.
and *Thiel, W.*, ceramic pigments, B., 561. Spinel pigments and spinels, B., 561. Relationships of formation and structure of spinel pigments, B., 561. Stability relationships of spinel pigments, B., 561.
Krause, W., and *Kahlenberg, L.*, palladium-hydrogen, A., 834.
See also *Bauer, O.*
Krauskopf, F. C., laboratory preparation of oxygen and of chlorine, A., 1090.
Krauskopf, K. B., and *Rollefson, G. K.*, photochemical reaction between chlorine and formaldehyde; preparation of formyl chloride, A., 177. Thermal reaction between formaldehyde and chlorine, A., 586. Reaction between chlorine and formaldehyde, A., 1107.
Krauss, E., incubator for biological laboratories, A., 1283.
Krauss, F., hydrogen peroxide, (P.), B., 992. Electrolytic cells suitable for producing persalts [e.g., persulphates], (P.), B., 1148.
and *Oettner, C.*, per-compounds. III. Persulfates, A., 833.
and *Prüssing, C.*, manner of combination of water and its influence on strength of hardened cement, B., 455.
Krauss, F. E., extending cooling action of ice, (P.), B., 786.
Krauss, G., vitamin-C content of fruit juices and apples, B., 172.
Krauss, G., and *Hertel, F.*, forest soils, B., 1059.
See also *Lüers, H.*
Krauss, W. E., *Bethke, R. M.*, and *Wilder, W.*, relative efficiencies of irradiated ergosterol and irradiated yeast for production of vitamin-D milk, A., 261.
and *Monroe, C. F.*, vitamin-A content of butter fat produced on maize and wheat rations, B., 332.
See also *Knoop, C. E.*
Kraut, H., *Frey, E. K.*, *Werle, E.*, and *Schultz, F.*, callicrein. IX. Detection and occurrence of callicrein in urine, A., 257.
and *Neffen, R. W.*, co-enzyme of glycolysis from tumours. III. A., 1008.
and *Pantschenko-Jurewicz, W. von*, composition and properties of esterases, A., 251.
Krauz, C., and *Majrich, A.*, stabilising action of tartaric acid on smokeless nitrocellulose powders, B., 47.
and *Štěpánek, J.*, simplified separation of picric and 2:4:6-trinitrobenzoic acids, B., 664.
Krauze, K. E., *Pamfilov, A. V.*, and *Rosljakova, E. N.*, degree of dispersion of lampblack, B., 791.
and *Rosljakova, E. N.*, micrography of litharge and minium, B., 723.
Krauze, L. E., and *Sokolov, P. I.*, influence of bubbles of gas evolved on conductivity of solutions during electrolysis, A., 304.
Krauze, M. V., *Nemtsov, M. S.*, and *Soskina, E. A.*, pyrogenetic reactions of condensation of hydrocarbons. II. Kinetics of polymerisation and decomposition of ethylene. III. Kinetics and mechanism of polymerisation of propylene. IV. Kinetics of polymerisation of butylenes and amylenes, A., 1081.
Krauze, S., maté, B., 428.
Kravtsoff, G., cathodic behaviour of organic copper salts, A., 45, 175.
Kraybill, H. R., and *Thornton, S. F.*, comparison of the official and a modified method for determining available potash in mixed fertilisers, B., 741.
See also *Brewer, P. H.*, *Halliday, G. E.*, and *Thornton, S. F.*
Krayer, O. See *Grabe, F.*
Krbek, F. von, foundation of thermodynamics, A., 691.
Krehma, I. J. See *Bannister, W. J.*
Křemá, A. See *Schur, H.*
Křemář, J. See *Šimek, B. G.*
Kretil, F., refining of kieselguhr, B., 451.
Activated carbon, (P.), B., 1082.
Krebitz, J., and *Mortl, F.*, road surface, (P.), B., 770.
Krebs, A. See *Flügge, S.*
Krebs, C., and *Clemmesen, J.*, lead compounds R232 and R237b used in experimental therapy of tumours and leucosis, A., 1021.
Krebs, H. A., urea formation in the liver, A., 242. Urea formation in the animal body, A., 779. Metabolism of amino-acids. III. Deamination of amino-acids. IV. Synthesis of glutamine from glutamic acid and ammonia, and the enzymic hydrolysis of glutamine in animal tissues, A., 1014, 1272.
See also *Weil-Malherbe, H.*
Krebs, K. See *Alterthum, H.*, and *Labes, R.*
Krebs, O., preparation of milk of lime and effluent sedimentation plant in ammonia works, B., 20. Costing of heat insulation, B., 81.
Krebs Pigment & Color Corporation, pigments [from 1-nitroso- β -naphthol], (P.), B., 239.
See also *Breyer, F. G.*
Kreff, H., physical properties of radiation from the discharge in mercury vapour, A., 137.
and *Seitz, E. O.*, regularities in radiation emitted by the positive column in the neon discharge, A., 136.
Kregten, J. R. N. van, determination of perborate in soap powder, B., 275, 639.
Kreichgauer, D., and *Mönch, F.*, anomalous forms of ionic movements, A., 1324.
Kreider, L. C., hot plate, A., 1217.
and *Evans, W. L.*, preparation of glucosidodihydroxyacetone pentaacetate, A., 477.
Kreidl, I., enamelled sheet iron or articles thereof, (P.), B., 234.
Kreimer, S., and *Nordmann, J.*, cataphoresis of normal and pathological crystallin, A., 377.
Krein, S. E. See *Tschernoshukov, N. I.*
Kreipe, H., titrimetric determination of alcohol with dichromate, B., 872.
Kreis, W. See *Stoll, A.*
Kreissler, O., and *Amer. Lurgi Corp.*, cellulose from wood and other cellulose-containing material, (P.), B., 1089.
Krejci, L., and *Svedberg, T.*, ultracentrifugal study of gliadin, A., 876. Salt-extractable proteins of wheat-flour, A., 1290.
Krekeler, H. See *Bodenstein, M.* and *Ramser, H.*
Krekeler, K., modern uses of lubricants, B., 1032.
See also *Röhrig, H.*
Kremens, A. See *Raiziss, G. W.*
Kremer, C. B. See *Thomas, Arthur W.*
Kremer, J. N. See *Tananaev, N. A.*
Kremer, M., *Wilson, A. T.*, and *Wright, S.*, gaseous interchanges through the visceral pleura of the cat, A., 520.
Kremers, R. E. See *Sell, H. M.*
Kremleva, E. A. See *Jakovkin, A. A.*
Křepelka, J. H., and *Kubis, J.*, ter- and quadri-valent manganese [chlorides], A., 716.
and *Rakušan, B.*, volumetric determination of minimal amounts of arsenic, A., 949.
Kreps, E. See *Borsuk, V.*
Kreschkov, A. P. See *Schorigin, P. P.*
Kress, C. B., report of the 1933—1934 Pic-Flour Committee, B., 651.
Kress, O., and *Harrison, W. D.*, cooking of kraft pulp with improperly settled white liquor, B., 719.
and *McIntyre, J. W.*, distribution of sulphur during the kraft pulping operation, B., 587.
and *Morgan, H. W.*, modified Oxford glossmeter, B., 753.
Swanson, W. H., *Porter, D. C.*, and *Smith, B. F.*, Texas Gulf Sulphur Co. spray-type sulphur burner, B., 21.
See also *Browning, B. L.*, *Laughlin, E. R.*, and *New Jersey Zinc Co.*
Krestinski, I. N., and *Eschtschenko, A.*, oxidability of turpentine from *Pinus silvestris* by atmospheric and pure oxygen, B., 31.
and *Kelbovskaja, M. K.*, acetylene series. VI. Oxidation of acetylenic hydrocarbons with permanganate, A., 604.

- Krestovnikov, A. N., and Karetnikov, G. A., specific heats of light-metal fluorides at high temperatures, A., 437.
- Koriakina, A. F., Kossovskaja, E., Retelskaja, P., and Schirobokov, S., action of monophosphate on the blood and the circulation in physical work, A., 239.
- Kretov, A. E., and Komissarov, J. F., aliphatic thioketones. I. Action of phosphorus pentasulphide on aliphatic ketones, A., 1107.
- Kretovitsch, V. L., sugars of assimilating leaves, A., 672.
- See also Kizel, A.
- Kretschmer, S. I. See Baranov, I. I.
- Kretschner, K., [development of] sarcina [in beer], B., 1016.
- Kretz, T. See Puening, F.
- Kretzdorn, H. See Schwartz, W.
- Kreuchen, K. H., measurements of small light intensities with a counter. I., A., 800.
- See also Hausser, K. W.
- Kreulen, D. J. W., coal bitumen. I, II., and IV., B., 53, 131, 580. [Preparation of coal samples for analysis], B., 258. Composition and properties of bituminous coal extracts, B., 611. Temperature-surface tension curves of bituminous-coal bitumens in relation to rank and mode of formation of the coal, B., 1124.
- and Den Otter, H., coal bitumen. III., B., 580.
- Kreutz, W., and Schull, F., [electric resistance] welding, (P.), B., 108.
- Kreutzmann, W. See Müller, E.
- Kreyeld, A. van, sensitometry based on the addition law, B., 702.
- Kriebie, V. K., activities and hydrolysis of sucrose with concentrated acids, A., 308.
- and Reinhart, F. M., e.m.f. measurements of hydrochloric acid solutions with and without sucrose and their relation to rate of sucrose hydrolysis, A., 308.
- Krieger, P., primary silver mineralisation at Sabinal, Chihuahua, Mexico, A., 955.
- Krieger, F. I., guanidine, glucose, and calcium content of blood in eclampsia, A., 1009.
- Krieger, W., and Kalle & Co., A.-G., light-sensitive layers containing a titanium salt of an organic hydroxy-acid, (P.), B., 430.
- Kries, B., and Seljakov, N., mutual diffusion of gases at high pressures, A., 692.
- Krijgsman, B. J., biochemical micro-methods. V. Nephelometric micro-determination of trypsin and cathepsin. VI. Photometric determination of amylase and maltase, A., 123, 249.
- Krilov, E. I. See Mokruschin, S. G.
- Krilova, N. N. See Smorodincev, I. A.
- Krilovskaja, R. S. See Petrov, G. S.
- Krim, E. S. See Gabinski, J. O.
- Krimmel, M., losses in size making and observations in the cooking of rosin, B., 775.
- Krings, W., equilibrium between molten metals and slags, A., 303.
- and Schackmann, H., oxygen pressures of liquid $\text{FeO-Fe}_2\text{O}_3$ melts, A., 1204.
- Kringstad, H., spectro-analytical determination of traces of lead in organic material, especially preserves, B., 921. Spectral analytical determination of lead in commercial tin, B., 954.
- Krise, M. A. See Donleavy, J. L.
- Krishna, S., and Varma, B. S., cultivation of *Artemisia*, A., 1290.
- See also Ghose, T. P., and Puntambekar, S. V.
- Krishnamurti, K., magnetic fields and electrolytic conductors, A., 1079.
- Krishnamurti, S. G., atomic energy states of tellurium, Te III, A., 907. Regularities in the spectrum of iodine IV, A., 1046. Spectrum of ionised tellurium, Te III, A., 1183.
- and Rao, K. R., spectrum of selenium. V. Structure of Se II, A., 675.
- See also Rao, K. R.
- Krishnan, K. S., large artificial crystals of graphite, A., 1449.
- and Banerjee, S., Stark splitting of the 4S level of the manganous ion in crystalline fields, A., 801. Magnetic susceptibilities of very small crystals, A., 924. Magnetic-crystalline action. III. Organic crystals, A., 924. Entropy of manganous ammonium sulphate at temperatures close to absolute zero, in relation to the magnetic anisotropy of the salt at room temperatures, A., 1198.
- and Ganguli, N., influence of "swelling" on abnormal unidirectional diamagnetism of graphite crystals, A., 814.
- and Guha, A. C., absorption spectra of nitrates and nitrites in relation to their photo-dissociation, A., 10.
- and Narayanaswamy, L. K., photo-dissociation of single crystals of potassium and sodium nitrates under polarised light, A., 682.
- and Seshan, P. K., orientations of impurity molecules included in crystals, A., 284.
- Krishnan, P. S. See Aiyar, S. S.
- Krishnan, R. S., optical evidence for molecular clustering in fluids, A., 11. Scattering of light by particles suspended in a medium of higher refractive index, A., 11. Depolarisation of Tyndall scattering in colloids. II., A., 821. Reciprocity theorem in colloid optics, A., 1075. Molecular clustering in binary liquid mixtures, A., 1200, 1445.
- Krishnaswami, K. R., and Murthi, D. S., tantalum and niobium. I. Analysis of mixtures of the pentoxides, A., 1096.
- See also Sunawala, S. D.
- Krishnaswamy, P. R., Manjunath, B. L., and Rao, S. I., roots of *Aristolochia indica*, Linn. I., A., 1433.
- Kriss, M., Forbes, E. B., and Miller, R. C., specific dynamic effects of protein, fat, and carbohydrate as determined with the albino rat on different planes of nutrition, A., 651.
- and Miller, R. C., derivation of factors for computing gaseous exchange and heat production in metabolism of caseinogen by the albino rat, A., 388.
- See also Forbes, E. B.
- Kristallinskaja, R. G. See Sadikov, I. S.
- Kristensen, M. K., Tovborg-Jensen, S., and Nielsen, N. C., soil reaction, B., 965.
- Kritschewski, I. L., and Pines, A. I., action of quinoline derivatives on gametocytes of *Plasmodium praecox*, A., 395.
- Kritschewski, I. R., thermodynamic foundations of adsorption of gaseous mixtures, A., 1316.
- and Kasarnovski, J. S., calculation of dipole moments, A., 808.
- Kritter, B. See Keil, W.
- Kriuchkova, A. P., *Azotobacter* method for determining potassium requirement of soils, B., 688.
- Kriukov, T. A. See Litvinov, N. D.
- Kriutschkov, N. See Volkovitsch, S.
- Krivieh, S. S. See Vafiadi, F. G.
- Krivobabko, I. P., and Schtscherbakov, I. A., kinetics of keto-enol transformations, A., 939.
- See also Schukarev, A. N.
- Krivobok, F. N., alloys of iron and chromium, B., 594.
- Krivosheev, S. A., bismuth salts from the Cottrell dust of sulphuric acid plants, B., 20.
- Križanovskaja, L. I. See London, E. S.
- Kříženecký, J., relation between quantity of milk, absolute fat production, and percentage of fat in milk, A., 106. Relation between milk yield, absolute fat production, and percentage fat content of milk in relation to the coefficient of Ezekiel, A., 379.
- Krochmal, F., corrosion of zinc in water in presence of oxidising agents. I., A., 939.
- Kroczeck, J. See Blüh, O.
- Kröger, C., and Fingas, E., system alkali oxide- $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2\text{-CO}_2$. III. Action of CO_2 and K_2CO_3 on potassium di- and tetra-silicate. IV. CO_2 pressure of the silica-rich portion of the system $\text{Li}_2\text{O-SiO}_2\text{-CO}_2$ and the action of alumina on lithium carbonate, A., 935, 1323.
- See also Neumann, B.
- Kroeger, J. W. See Sowa, F. J.
- Kröhn, B. See Milbauer, J.
- Kröhnke, F., enol-betaines. I., A., 987. Syntheses of pyridiniummethanols. II. Mechanism of the condensation reaction: isoquinoliniummethanols, A., 1131.
- Kroeker, E. H., Strong, F. M., and Peterson, W. H., chemistry of mould tissue. VII. Lipins of *Penicillium aurantio-brunneum*, A., 535.
- Kroemer, F., relative costs of apparatus and chemicals for softening of boiler water, B., 433.
- Kröner, E., determination of small quantities of tellurium in lead, B., 459.
- Kroenig, W. See Standard-I.G. Co.
- Kroenig, W. O., and Pavlov, S. E., influence of manganese on corrosion of magnesium, B., 808.
- Kroepelin, H., and Vogel, E. [with Pfeiffer, H.], action of atomic hydrogen on oleic acid and paraffin oil, A., 730.
- Kroepfle, W., and Krupp Grusonwerk A.-G., apparatus for mixing materials, (P.), B., 609.
- Krogh, A., determination of ammonia in water and air, A., 184. Conditions of life in the ocean, A., 406. Conditions of life at great depths, A., 406. Syringe pipettes, A., 599. Measuring syringes and their application, especially to accurate determination of oxygen in water by Winkler's method, A., 717. Determination of oxygen in water by syringe pipettes, B., 528.
- and Keys, A. B., determination of dissolved organic carbon and nitrogen in sea-water, A., 185.
- See also Keys, A. B.
- Krogh-Lund, A. T., and Kruger, A. S., I., reducing hardness of water, (P.), B., 978.
- Krogvik, T., hardening of cast iron, B., 676.
- Krolevets, S. M., analysis of chromium-steel slags, B., 26.

- Kroll, L., and Anderson, E. A., atmospheres for annealing high-copper brass in relation to buffing, B., 856.
- Kroll, W., vacuum distillation of metals. I. Refining chromium, aluminium, and silicon by evaporation in a high vacuum; refining of beryllium and iron, B., 729, 853.
- Krollpeiffer, F., Rosenberg, A., and Mühlhausen, C., triazolium salts. III. Triazolium salts from azimides and ψ -azimides, A., 359.
- and Müller, Alfred, phenacylpyridinium compounds, A., 987.
- Kromm, I. I., prospecting for bituminous shale in the Ozinki-Tshair Lower Volga district, A., 841.
- Kron, L. C. See Simon, A. W.
- Kron, S., examination of Hungarian lard, B., 416.
- Kronberg, N. M., milk powder, (P.), B., 286.
- Kronenberger, P., action of different radiations on gelatin, A., 769.
- Kronenfeld, W. von. See Baukloh, W.
- Kronheim, L., treatment of stuffing for chairs, (P.), B., 1088.
- Kronig, R. de L., neutrino theory of light. II., A., 1187.
- See also Coster, D.
- Kronman, J. See Birstein, G.
- Kronstein, (Miss) S., graphic comparison of effectiveness of hot vulcanisation at variable temperatures, B., 600.
- Krop, S. See Koppanyi, T.
- Kropacheva, A. A. See Sergievskaja, S. I.
- Kropacsy, S. See Janke, A.
- Kropiwnieki, E., coal-distillation apparatus, (P.), B., 485.
- Kropp, C. L., and Ohio Carbon Co., absorbent briquette, (P.), B., 536.
- Krotov, I. V., stannic and stannous thiocyanates, A., 50.
- and Ivanov, G. G., protective films on magnesium obtained by electrolysis of sodium silicate and potassium dichromate, B., 105. Protecting layers produced on magnesium and aluminium by oxidising baths, B., 413.
- Krotova, N. A., theory of substantive dyes. II. Influence of cations of different valency on the dispersity of substantive dyes and their adsorption by cotton fibre, B., 988.
- Kroupa, E. See Hecht, F.
- Kruber, O., and Schade, W., auto-ignition temperatures of aromatic *ortho*-compounds, A., 41. 1:2-Dimethylnaphthalene of coal tar, A., 334.
- Krügel, C., Dreyspring, C., and Heinz, W., supply of easily soluble phosphoric acid in surface and subsoils, B., 165. Water-solubility of basic slag, B., 493.
- Krueger, A. C. See Byler, W. H.
- Krueger, A. P., and West, N. S., accelerating effect of manganous ions on phage action, A., 1542.
- Krüger, D., and Grunsky, H., anomalous diffusion, A., 25. Alteration of cellulose by alkaline solutions, B., 623.
- Lüdtke, M., and Oberlies, F., acetylation of cellulose, A., 201.
- and Tschirch, E., iodometric determination of sugar in presence of thiocyanate, A., 270.
- See also Freundlich, H., and Tschirch, E.
- Krüger, E. See Hertel, E.
- Krüger, F., and Stabenow, G., determination of heats of vaporisation of electrons and their temperature coefficients for molybdenum, tungsten, and tantalum filaments by the cooling method, A., 801.
- See also Freitag, H.
- Krüger, W., Wimmer, G., and Lüdecke, H., influence of nematodes on yield and composition of sugar beet with different manuring, B., 1158.
- Krüll, F., formation of calcium chloride in salt-deposit liquor. II. Action of chloride solutions on anhydrite, B., 628. Potentiometric determination of molybdenum in ores and rocks, B., 677.
- Krug, G. C. See Du Pont de Nemours & Co., E. I.
- Kruger, F., respiration of *Ascaris suilla*, A., 519.
- Kruger, P. G., nuclear shells: angular and magnetic momenta of nuclei, A., 804. and Cooper, F. S., Be III $1snp\ ^1P_1$ — $1s^21S_0$ series, A., 135.
- and Weissberg, S. G., deepest terms in ions of the isoelectronic sequence Ar—Mn VII, A., 1437.
- See also Cooper, F. S.
- Kruger, A./S., I. See Krogh-Lund, A. T.
- Krugliakov, I., tobacco seeds as valuable raw material, B., 1164.
- Krugliakova, K. G. See Tschitschenko, V. E.
- Kruglikov, A. E. See Iljinski, V. P.
- Kruh, O. See Krumholz, P.
- Kruilov, L. P., diffusion of dyes in gelatin in the hydrotype process, B., 574.
- Kruim, V. S., determination of autoxidizability of coal, B., 436.
- Kruisheer, C. I., Vortsman, N. I. M., and Kniphorst, L. C. E., determination of hydroxymethylfurfuraldehyde and levulose in port wine and other sweet wines, B., 871.
- Kruitckova, A. P. See Uspenski, E. E.
- Kruihof, A. A., and Ornstein, L. S., excitation of some spectral lines of hydrogen by electron impact, A., 1045.
- See also Penning, F. M.
- Krumbein, E. See Cassel, H. M.
- Krumbein, W. C., thin-section mechanical analysis of indurated sediments, A., 1344.
- Krumbhaar, W., rehabilitation of natural resins, B., 160. Phthalic acid resins in American varnish industry, B., 239. Synthetics [resins], B., 320, 815. Phenolic and alkyd resins of to-day, B., 511. Romance in the paint trade, B., 684. Driers and alkyds, B., 1055.
- Krumholz, E. See Krumholz, P.
- Krumholz, P., and Kruh, O., detection of cadmium as selenide, A., 837.
- and Krumholz, E., use of styryl dyes in quantitative micro-analysis, A., 1473.
- and Watzek, H., relation between sensitivity and mol. wt. (weighting effect), A., 1474.
- See also Feigl, F.
- Krumin, P., testing the strength of glued joints in plywood, B., 548. Veneer glueing with casein and albumin, B., 592.
- Krumins, K., "kalimeter" for determining the potassium requirement of soils, B., 646.
- Krupp Akt.-Ges., F., articles [hydrogenation apparatus] from steel alloys, (P.), B., 155, 235. [Hardenable] iron alloys, (P.), B., 314. [Cobalt]-iron alloys [for precipitation-hardening], (P.), B., 504. [Aluminium-nickel-iron] alloys for manufacture of permanent magnets, (P.), B., 504.
- Krupp Akt.-Ges., F., articles [hydrogenation apparatus] from steel alloys, (P.), B., 556, 679. Iron alloys [for permanent magnets], (P.), B., 772. Sintering of fine ores, (P.), B., 955. [Cobalt]-iron alloys [for precipitation-hardening], (P.), B., 998.
- Krupp Grusonwerk Akt.-Ges., F., apparatus for continuous extraction of material, (P.), B., 51. Rotary furnaces [for distilling metals], (P.), B., 234. Roasting and sintering of galena, (P.), B., 235. Roasting of blende or other sulphides, (P.), B., 414. Apparatus for calcining, drying, and other similar purposes, (P.), B., 434. Apparatus for fractional condensation of metal vapours, (P.), B., 555. Lixiviation of ores of precious metals, (P.), B., 908.
- See also Holzapfel, K. E. E., Johannsen, F., and Kroeppfe, W.
- Krupski, A., and Almasy, F., colorimetric determination of serum-bilirubin; light-extinction curves of azobilirubin, A., 1290.
- See also Almasy, F., and Ottensooer, F.
- Kruse, W., and Fischer, M. J., oligodynamically active substances for sterilising and disinfecting, (P.), B., 928.
- Krusser, O. V. See Jakimov, P. A.
- Kruszynski, J., cyto-chemistry of incinerated nerve-cells, A., 231.
- Kruta, V., fatigue of isolated muscle in relation to possible effect of acetylcholine liberated during excitation of the nerve, A., 529.
- Krutko, G. A., linear problems of the theory of Brownian movement. III., A., 162.
- Krutter, H. M., energy bands in copper, A., 1450.
- See also Slater, J. C., and Warren, B. E.
- Krutzsch, J., and Kahle, H., preparation of pure oxygen for laboratory use, A., 181.
- Kruyt, H. R., ionic micelle or electric double layer, A., 298. New researches on colloids. [I. The electrical double layer. II. Coacervation], A., 298. Action of electrolytes on hydrophobic colloids, A., 933.
- and Cysouw, H. A., electric double layer of colloids. V. Supplementary investigation of peptisation by isomorphous ions. VI. Peptisation by foreign ions, A., 445.
- and De Jong, H. G. B., extension of theory of complex coacervation to ionic disperse systems, A., 1320.
- and Kruyt, T., examination of positively- and negatively-charged carbon surfaces by adsorption of thorium-B, A., 1069.
- and Ruyssen, R., streaming potentials using paraffin capillaries, A., 30. Flow potentials of barium sulphate, A., 161.
- Kruyt, T. See Kruyt, H. R.
- Krygsman, C. See Ornstein, L. S.
- Krylova, N. N. See Smorodincev, I. A.
- Krynitsky, A. I., and Saeger, C. M., jun., effect of melting conditions on running quality of aluminium cast in sand moulds, B., 191.
- Krystof, J. See Ludwik, P.
- Kryukova, A. S., preparation of artificial leather from polymerised oils, B., 417.
- Krzikalla, H., and Eistert, B., relations between constitution and substantivity of cotton-substantive "naphthols," A., 858.

- Krznarich, P. W. See Anderson, Ernest.
- Krzyżanski, S. See Krause, Alfons.
- Krzyżkiewicz, J., comparison of results of determinations of heat of combustion of individual liquids and mixtures in the Junkers and in the bomb calorimeter, B., 212.
- Ksanda, C. J. See Tunell, G.
- Ku, C. C. See McKay, C. M.
- Ku, D. Y., and Simon, M. A., influence of various diets on experimental amyloidosis in mice, A., 513.
- Kubaschewski, O. See Seith, W.
- Kubelinek, A. I., "phenylic" cracking system [for oils], B., 1030.
- Kubelka, V., and Heger, O., effect of acids on vegetable[tanned] leather. II. Deterioration of pure oakwood-tanned leather by hydrochloric, sulphuric, oxalic, and acetic acids, B., 818.
- Némec, V., and Zuravlev, S., determination of moisture in vegetable-tanned leather [containing grease], B., 281.
- and Peroutka, F., effect of [previous] soaking on the water absorbed by sole leather, B., 469.
- Kubelková, O. See Knop, J.
- Kubikowski, P. See Bross, W.
- Kubinzy, R. von, [nutrient] losses during making of silage, B., 251.
- Kubis, J. See Krepelka, J. H.
- Kubo, H. See Shinozaki, Y.
- Kubo, M., high-frequency conductivity of an electrolyte in the region of anomalous dipolar absorption of the solvent, A., 169.
- Dielectric constants of gases and vapours. I, II, and III, A., 567, 916, 1304.
- Kubota, B. See Hata, K., Tatematsu, K., Yamanaka, T., and Yoshikawa, K.
- Kubota, T. See Fujise, S.
- Kubowitz, F., restriction of butyric acid fermentation by carbon monoxide, A., 125.
- Kucera, J. J. See Carpenter, D. C.
- Kuckro, W., and El Glykol Waterproofing & Construction Corp., waterproofing compound and paint vehicle, (P.), B., 367.
- Kuczyński, H. See Sucharda, E.
- Kuczyński, T., treatment of langbeinite, B., 145.
- Kudelya, N. N., regeneration of bone black, B., 211.
- Limits of sugar extraction from spent active carbon, B., 518.
- Kudin, I. F. See Finkelstein, V. S.
- Kudo, H., blood and its components. I. Physico-chemical investigation of their magnetic properties, A., 372.
- Kudra, O. K., electrolysis of cadmium sulphate, B., 857.
- and Ivanov, K., examination of cathode sludges obtained when using currents of high density, B., 772.
- Causes of formation of spongy cathode deposits, B., 772.
- See also Plotnikov, V. A.
- Kudrevatov, A. K., analysis of calcium fluoride, B., 146.
- Kudrjashov, B. A., synthesis of folliculin in female [rats] with A-avitaminosis, A., 902.
- Kudrjatzev, P. A., and Sinaiski, L. M., production of bridge steel containing a moderate amount of manganese, B., 499.
- Kudrjavzev, B. B., vapour pressure of homologues of benzene; new method of determining vapour pressure, A., 22.
- Measurement of vapour pressure of solutions by the dew-point method, A., 24.
- Kudrjavzeva, A. V. See Murri, I. K., and Palladin, A. V.
- Küchler. See Kaufmann, H. P.
- Kueck, P. D. See Brewer, A. K.
- Kühl, Hans, Parga-Pondal, J., and Baentsch, S., water penetration as a means of investigating corrosion phenomena in mortars, B., 24.
- Thilo, F., and Yü, A. C., dispersion relations in aqueous solutions of mono-calcium aluminate, A., 26.
- Kühl, Hugo, hydrochloric acid as reagent for proteins and their derivatives, A., 1391.
- Stimulatory action of disinfectants, A., 1420.
- Fission of starch in heated wheat, B., 121.
- Significance of moisture in bread cereals and flour, B., 520.
- Influence of free fatty acids on baking quality of wheat flour, B., 520.
- Baking quality of wheat flour, B., 746.
- Action of enzymes in flour and their elimination, B., 921.
- Kühl, L. See Schmitz, A.
- Kühle, O., Balz furnace and its suitability for roasting ores for zinc electrolysis, B., 28.
- Kühn, J. See Cădea, C.
- Kühn, K. See Ehrhardt, K.
- Kühn, S., relation between lime content and p_H values of soils, B., 470.
- Kühn, W., the microscope in the printing ink industry, B., 1151.
- Kühnel, R., varying behaviour of zinc protective plates in boilers of German railway steamships, B., 289.
- Kühnlenz, L., fertilisers, (P.), B., 375.
- Kuen, F. M., photobiological desensitisation in the ultra-violet; photobiological action of sodium sulphite on erythrocytes, A., 1275.
- See also Hausmann, W.
- Kuenemann, M., use of special cements in the construction of road surfaces prepared with hydraulic binding agents, B., 1143.
- Küng, A., permanganate-chlorine number and Roe-Küng titrimetric chlorine number [of pulp], B., 400.
- Künkele, F. See Täufel, K.
- Küntzel, A., action of different metal compounds on gelatin, B., 1106.
- and Königfeld, G., theory of mineral tannage. I. Turbidity and precipitation phenomena on rendering aluminium and chromium salt solutions basic, B., 818.
- and Riess, C., composition of the chrome-tanning compounds combined on hide fibres of chrome-tanned leather, B., 564.
- Riess, C., and Königfeld, G., theory of mineral tannage. II. Behaviour of basic aluminium and chromium salt solutions on ageing, B., 818.
- Kuentzel, W. E. See Sullivan, F. W., jun.
- Küpferle, G. See Faessler, A.
- Kürbis, P. See Deines, G.
- Kürschgen, M. See Reinartz, F.
- Kürschner, K., lignins, nitrolignins, and oximinoketones; (preparation and crystallisation properties of nitrolignins), B., 399.
- See also Bernhauer, K.
- Kürti, N., and Simon, F., magnetic cooling method, A., 58, 290.
- Experiments at very low temperatures obtained by the magnetic method. I. Production of low temperatures, A., 721.
- Küstner, Hans, and Arends, E., efficiency coefficients, intensity ratios, and absorption probabilities in the L series of the heavy elements, A., 676.
- Küstner, Heinz, increase of milk secretion by antithyroid protector, A., 647.
- Küstner, P., insulating varnishes, B., 684.
- Küttner, F. See Schramek, W.
- Kufferath, A., use of ozone as rapid drying agent for paint and varnish films, B., 913.
- Luminescence analysis in paint and varnish investigations, B., 1055.
- Kuffner, F. See Späth, E.
- Kuhl, P. E. See Standard Oil Development Co.
- Kuhlmann, A. G., quantitative extraction, A., 724.
- and Golossova, O. N., soluble matter in flour, dough, and bread, B., 824.
- Kuhlmann, H., and Kuhlmann, H. A., palate plate, (P.), B., 1098.
- Kuhlmann, H. A. See Kuhlmann, H.
- Kuhn, A., colloid chemistry, homœopathy, and medicine, A., 380.
- and Schäfer, G., capillary distribution of plant constituents, B., 573.
- Kuhn, C. S., and Richter, G. H., synthesis of pyridine derivatives of barbituric acid, A., 1504.
- Kuhn, E. See Hausser, K. W.
- Kuhn, H. See Jackson, Derek A.
- Kuhn, R., flavins, A., 359, 1134.
- and Bär, F., constitution of hydroxyazo-compounds, A., 613.
- Constitution of the phthalones, A., 758.
- and Brockmann, H., stepwise degradation and constitution of β -carotene, A., 611.
- and Franke, Walter, redox potential of porphyrin oxide and porphyrindine, A., 1252.
- and Giral, F., thermal behaviour of betaines, A., 478.
- Influence of chain-length on taste of aliphatic ω -betaines, A., 636.
- and Kaltschmitt, H., isolation of lactoflavin (vitamin-B₂) from hay, A., 415.
- State of vitamin-B₂ in cow's milk, A., 545.
- Kaltschmitt, H., and Wagner-Jauregg, T., flavin content of liver and muscle of healthy and B₂-avitaminotic rats, A., 669.
- Katz, H., and Franke, Walter, constitution of porphyrindine; magnetic proof of an organic bi-radical, A., 223.
- and Reinemund, K., synthesis of 6:7:9-trimethylflavin (lumilactoflavin), A., 94.
- Reinemund, K., Weygand, F., and Ströbele, R., synthesis of lactoflavin (vitamin-B₂), A., 1382.
- and Rudy, H., 6:7-dimethyl- and 1:3:6:7-tetramethylalloxazine, A., 94.
- Photochemical formation of 6:7-dimethylalloxazine from lactoflavin, A., 224.
- Optical activity of lactoflavin, A., 359.
- 6:7-Dimethylflavin-9-acetic acid, A., 503.
- Synthetic vitamin-B₂-phosphoric acid, A., 545.
- Constitution and biological activity of flavins, A., 993.
- Rudy, H., and Reinemund, K., natural and synthetic lumilactoflavin, A., 359.
- Rudy, H., and Weygand, F., sugar-like side-chain of lactoflavin, A., 760.
- and Schön, K., pyocyaninium perchlorate, A., 1255.
- Wagner-Jauregg, T., Klaveren, F. W. van, and Vetter, H., yellow pigment containing sulphur from yeast, A., 1026.
- and Weygand, F., synthesis of 6:7-dimethyl-9-n-amyflavin, A., 94.
- Synthetic compounds of the lactoflavin group, A., 224.

- Kuhn, R., and Weygand, F., synthetic vitamin-B₂, A., 262. 6:7-Dimethyl-9-l-araboflavin, A., 358. Synthetic d-, l-, and dl-9-araboflavin, A., 871. Improvement of the flavin synthesis; boric acid process, A., 1134.
- See also Hauser, I., and Hauser, K. W.
- Kuhn, W., and Biller, H., rotational contribution of chromophoric groups in compounds of analogous structure, A., 959. Rotatory dispersion of α -iodopropionic acid and β -octyl iodide, A., 1192.
- and Erdős, G., colloid chemical-topochemical relations in photographic images, A., 580. Optically produced anisotropy of thixotropic gels, A., 580.
- See also Elkins, H. B.
- Kuhn, W. E. See Kemp, L. C., jun.
- Kuhnert, W. A., treatment of brine containing soluble silica, (P.), B., 899.
- Kuhring, M. S., use of mixtures of gasoline with ethyl and isopropyl alcohols in internal-combustion engines, B., 86.
- Kuhrmann, F. See Gen. Aniline Works.
- Kuhrts, G. J., jun. See Totman, F. B.
- Quick, L. F., and Adkins, H., preparation, alcoholysis, and hydrogenolysis of nicotinylacetylmetanols, A., 499.
- See also Adkins, H.
- Kuipers, D. N., purification of water for use in covered-in and open-air swimming baths, (P.), B., 1024.
- Kuipers, H. H. See Coster, D.
- Kuisel, H. F., water analysis. I, II, and III, A., 462; B., 432, 880.
- Kuk, S. See Fodor, A.
- Kukai, R. See Kiss, A. von.
- Kukolev, G. V., and Amerikov, A. V., cement for repairing coke ovens at high temp. during operation, B., 993.
- Lozinski, N., and Ter-Mikaeliantz, E. I., modifications of quartz in Dinas brick and their determination, B., 804.
- and Slabovskii, G. I., quartz grog mixes, B., 803.
- Kukos, A., anterior-pituitary sex-hormone content in urine of elderly men, A., 412.
- Kukusehkin, I. I. See Libinson, I. M.
- Kulakov, N. N. See Volarovitsch, M. P.
- Kulberg, A., and Liadvanski, G., resistance of open-hearth furnace bottoms, B., 904.
- Kulberg, L. M., drop method of detection of copper, A., 318. Detection of fluoride ions, A., 717. Vacuum filter for drop analysis, A., 952.
- Kulenkampff, H., investigations of ultraradiation corpuscles, A., 143. Simple registering micro-photometer, A., 320.
- Kulev, L. P. See Tronov, B. V.
- Kulikov, A. I., analysis of the indophenol obtained from carbazole and p-nitrophenol, B., 1084.
- Kulikov, P. S. See De Kolosovski, N. A.
- Kulikov, V., preparing chamois leather of natural colour from rejected kid skins, B., 863.
- Aljukurinskaja, N., and Popova, A., fermentable sugars and the hydrolysis of carbohydrates, B., 119.
- and Kologrivova, V., preparation of lactic acid by direct fermentation of barley, B., 872.
- and Popova, A., ion antagonism and activation in alcoholic fermentation, A., 123.
- Kulikova, L. E. See Andreev, N. N.
- Kulitans, P., manuring of newly cultivated soils. V. Lettland, B., 515.
- Kulpina, K. I. See Tschufarov, G. I.
- Kulski, L. A., and Glazman, J. M., application of activated and regenerated charcoals to dechlorination of water, B., 288.
- and Moritz, P. B., dechlorinating power of non-activated charcoals in comparison with commercial activated ones, B., 288.
- Kultashev, N. V., and Santalov, F. A., metal membranes, A., 931.
- Kumami, S., sulphur content of pancreatic blood and thoracic lymph. III. Sulphur content of thoracic lymph after pancreatectomy. IV. Sulphur content of thoracic lymph after ligation of the pancreas and after injection of secretin in dogs. VI. Glucose injection in vagotomized dogs, A., 378, 1518.
- Kumanin, K., laboratory furnace working at 1550°, A., 951. Physico-chemical study of thermo-phosphate production. II. Application of illumination to visual observations at high temperatures, B., 304.
- Kumar, K. See Singh, B. N.
- Kumari, Z. I. See Moldavski, B. L.
- Kumashiro, S. See Harukawa, C.
- Kumeno, Y. See Takano, M.
- Kumetst, K. See Hüchel, W., and Pfeiffer, P.
- Kuminova, E. I. See Jakimov, M. N.
- Kumler, W. D., limiting effect of the Debye equation on polarisation concentration curves, A., 306. Effect of the hydrogen linking on dielectric constants and b.p. of organic liquids, A., 683.
- and Daniels, T. C., titration curves and dissociation constants of l-ascorbic acid (vitamin-C) and diethyl dihydroxymaleate, A., 1460.
- and Porter, C. W., dipole moments and molecular structure of amides, A., 283.
- Kumon, T., colorimetric determination of urinary indican by means of ninhydrin, A., 648. Occurrence of arginase in the giant salamander, A., 1537.
- See also Takahashi, Ichimatsu.
- Kunberger, A. F., and United Gas Improvement Co., low-gravity gas, (P.), B., 711.
- Kunde, H., effect of fillers on variability of physical properties of tar in fine-mineral mixtures, B., 535.
- Kunde, M. M., Herwick, R. P., Learner, A., and Sternbaek, M., non-production of granulocytopenia with an amidopyrine compound in some acute infections, A., 1411.
- Kundera, M. See Bureš, E.
- Kundert, J. G., and Heberlein & Co. A.-G., printing of animal fibres, (P.), B., 402.
- Kung, H. C. See Kao, T. Y.
- Kung, T. T. See Chao, C. Y.
- Kunin, T. I. See Postnikov, V. F.
- Kunisch, G. See Schulz, K. G.
- Kunitz, M., determination of rennet activity of chymotrypsin, A., 785.
- and Northrop, J. H., isolation of crystalline trypsinogen and its conversion into crystalline trypsin, A., 252. Crystalline chymotrypsin and chymotrypsinogen. I. Isolation, crystallisation, and properties of a new proteolytic enzyme and its precursor, A., 785.
- See also Holter, H.
- Kunos, S. See Fodor, E.
- Kunzman, C. H., and Nelson, R. A., disappearance of hydrogen in presence of potassium and lithium ion sources, A., 4.
- Kuntz, E. See Feist, K.
- Kuntz, W. A., and Ruehle, G. D., melanose and stem-end rots of citrus trees, B., 423.
- Kuntz, W. J., treatment [hydration] of lime, (P.), B., 590.
- Kunz, A. F., determination of caffeine in biological fluids and tissues, A., 397.
- Kunz, E. See Keil, W.
- Kunz, J., photo-electric effect of caesium vapour, A., 4.
- Kunz, K., Weidle, H., and Fischer, K., constituents of ammoniacum resin. I, A., 219.
- Kunz-Krause, H., chloric acid: only a limited plant poison, A., 254.
- Kunze, G. See Riesser, O.
- Kunze, H. W., treatment of acid tar or sludge obtained in refining oils with sulphuric acid, (P.), B., 538.
- Kunzelmann, N. See Rollett, A.
- Kunzl, V., K-series of magnesium and sodium, A., 1293. Focussing in X-ray spectrography, A., 1475.
- Kunzová, H. See Štefl, J.
- Kuper, J. B. H. See Harnwell, G. P., and Van Voorhis, S. N.
- Kupinskaja, G. V. See Schilov, E. A.
- Kuplenskaja, O. I., physiology of micro-organisms, *Fusarium beta*, *Macrosporium commune*, and *Verticillium lateritium*, A., 405.
- Kuppel, H. See Kuppel & Siméant.
- Kuppel & Siméant, Kuppel, H., and Siméant, L., electrolytic process [for metal deposition], (P.), B., 506.
- Kurahashi, K. See Minatoya, S.
- Kuraš, K. See Kallauner, O.
- Kuraš, M. See Dubský, J. V., and Spacu, G.
- Kurata, K. See Winokuti, K.
- Kurath, F., and Economy Fuse & Manufg. Co., phenol-furfural[dehyde] condensation products, (P.), B., 737.
- Kurbatov, I. D. See Baranov, V. I.
- Kurdjumov, G., and Stelletzky, T., intermediate phase in copper-aluminium alloys above the eutectic, B., 411.
- See also Kaminski, E.
- Kurennova, A. M. See Sakostschikov, A. P.
- Kurie, F. N. D., nitrogen disintegration by a very fast neutron, A., 7. Disintegration of nitrogen by neutrons, A., 277.
- Kurien, P. N., Pandya, K. C., and Peter, C. J., condensation of aldehydes with malonic acid in presence of organic bases. III. Condensation of salicylaldehyde with ethyl malonate, A., 961.
- Pandya, K. C., and Surange, V. R., condensation of aldehydes with malonic acid in presence of organic bases. I. In presence of pyridine alone, A., 353.
- See also Khan, A. A.
- Kurihara, M., theory of calcium chromosphere, A., 911.
- Kurilo, M. E., tobacco glucoside, A., 1550.
- Kuriyagawa, T., Okawa, H., Tajima, K., Hatakeyama, T., and Katsura, S., fat and lipin contents of blood in the right and left heart, A., 653.
- Kurlin, M. V., silica gel for oil regeneration, B., 132.
- and Blinova, A. M., oxidation of transformer oils, B., 134.
- Kurmies, B. See Alten, F.
- Kurnakov, N. S., and Ageeva, A. V., physico-chemical investigation of alloys of thallium, bismuth, and lead, and alloys of bismuth, thallium, and cadmium, A., 576.

- Kurnakov, N. S., Ageeva, A. V., and Ageev, N. V., physico-chemical investigation of the γ -phase of thallium-bismuth alloys, A., 576.
- and Kuznetsov, V. G., metastable hydrates of magnesium sulphate in the system magnesium chloride-magnesium sulphate-water, A., 583.
- and Ravitsch, M. I., singular elements of chemical diagrams, A., 583. Singular fold of the ternary system sodium chloride-platinic chloride-water, A., 583, 1461.
- and Schojchet, D. N., ternary system ammonia-hydrogen chloride-water, A., 583.
- Kuroda, A., pharmacological studies of aromatic guanidine derivatives. I. General action and influence on blood-coagulation. II. Influence on organs of circulation, A., 528, 894.
- Kuroda, C., pigment of "awobana." III., A., 1290.
- and Wada, M., pigment of "adsuki bean," A., 267. Colouring matter of shiso, A., 674. Kuromamin, the colouring matter of "kuromame." III., A., 1041. Pigment of egg-plant. II., A., 1290.
- Kurokawa, H., effects of endocrine products and vegetative nerve poisons on liver function, A., 540.
- Kuron, H., determination of total surface area of soils, clays, and similar substances. VII. Water absorption in clay saturated with non-dissociating cations, B., 197.
- Kurosawa, T., viscosity-temperature relation of Japanese petroleum oils, B., 1125.
- Kursanov, A. L., and Kazakova, M. N., physiology of sugar accumulation in sugar-beet. I. Transformation of sugars in leaf scions. II. Influence of different sugars on photosynthetic energy, A., 264.
- and Ugriumov, P. G., causes of the irregular course of photosynthesis during the day; diurnal course of respiration in sugar-beet leaves, A., 1177.
- Kursanov, D. N., parachors of polycyclic compounds, A., 15.
- Kutenacker, A., Mutschin, A., and Stastny, F., decomposition of polythionate solutions, A., 1464.
- Kurth, E. F., and Ritter, C. J., spruce holo-cellulose and composition of its easily hydrolysable fraction, A., 268.
- Kurtschatov, B. V., Kurtschatov, I. V., and Latischev, G. D., disintegration of boron by slow neutrons, A., 678.
- Kurtschatov, I. V., Missovski, L., and Roussinov, L., case of artificial radioactivity produced by bombardment with neutrons without capture of the neutron, A., 678.
- See also Arsenieva, A. N.
- Kurtschatov, I. V., artificial radioactivity and the scheme of Landé, A., 142. Seignette salt in the neighbourhood of spontaneous orientation, A., 572.
- Kostina, T. Z., and Rusinov, L. I., contact phenomena in carborundum resistances, A., 1191.
- and Latischev, G. D., observations in the Wilson chamber and the Fermi effect, A., 1296. Artificial radioactivity on irradiating gold with neutrons, A., 1297.
- Missovski, L., Ereimejev, M., and Schtschepkin, G., energy of neutrons and the Fermi effect, A., 1296.
- Kurtschatov, I. V., Nemenov, L., and Selinov, L., artificial radioactivity of ruthenium bombarded by neutrons, A., 1050.
- and Schakirov, A., inversion phenomena in polarisation of Rochelle salt crystals, A., 1310.
- Schtschepkin, G., and Vibe, A., high-speed electrons liberated from fluorine after bombardment by neutrons, A., 7.
- and Sinelnikov, K. D., disintegration of Li^6 by protons, A., 559.
- Sinelnikov, K. D., Schtschepkin, G., and Vibe, A., radioactivity of He^3 , A., 558.
- See also Arzimovitsch, L., Budnizki, D. Z., Deisenroth-Missovski, M., Ereimejev, M., and Kurtschatov, B. V.
- Kurtschatov, P. A., Skokov, M. F., and Pil, J. F., determination of adsorbed calcium in carbonate soils, B., 72.
- Kurtz, L. J., kinetics of anode film formation on metals, A., 1083.
- Kurtz, S. S., *jun.*, graphical correlation of solvent extraction data, B., 753.
- Kuruindin, K. S., and Ivanov, I. I., refining of gasolines of primary tars with zinc chloride and ferrous chloride. I., B., 54.
- and Shumilov, A. I., refining of gasolines of primary tars with zinc chloride and ferrous chloride. II. Analysis of fractions of gasoline from Cherekmkhov tar, B., 54.
- See also Karavaev, N. M.
- Kurz, H., chemistry of linseed stand oil and thickening of zinc white-linseed stand oil mixtures, B., 640.
- Kuschelevski, B., vapour-phase Soviet [oil-cracking unit, B., 1030.
- Kusin. See under Kuzin.
- Kusmina. See under Kuzmina.
- Kusner, T. S. See Kiprianov, A. I.
- Kusov, A., determination of vulcanisation optimum [of rubber] by means of the residual extension, B., 279.
- Kussmann, A., ferromagnetic alloys and their conformity to laws, B., 551.
- See also Friederich, E., and Graf, L.
- Kusui, K., composition of larval sacs of sacciferous larvae (*Psyche*), A., 1144.
- Fate of hydroxymethylfurfuraldehyde and of pyrrole in frogs, A., 1154.
- Kúthy, A. *von*. See Went, S.
- Kutscher, W., urinary phosphatase. I., A., 1279.
- and Wolbergs, H., urinary phosphatase, A., 1268.
- Kutschment, M. L. See Burkser, E. S.
- Kutter, F., separation of sediment due to boiling and cooling of wort, B., 203.
- and Siegfried, H., separation of coarse and fine sediments [of beer wort], B., 202.
- Kutuiev, S. K. See Kondratiev, E. F.
- Kutzelnigg, A., brick-red zinc oxide, A., 180. Surface chemistry of tin, A., 945. Fluorescence of zinc oxide-iron oxide mixtures and its dependence on the temperature of heat treatment, A., 1055.
- See also Beutel, E.
- Kutzev, S. S., obtaining magnesia and sugar by treatment of molasses with dolomite, B., 823.
- Kuusinen, J., and Kjellman, I., relation between the capacity of the heat exchanger and boiler plant of a sulphite-pulp mill, B., 184.
- Kuwata, T. See Tanaka, Yoshio.
- Kuzdrzal, S. See Dziewoński, K.
- Kuzei, N. See Ueno, Sei-ichi.
- Kuzell, C. R., and United Verde Copper Co., metallurgical apparatus [copper converter], (P.), B., 106.
- Kuzin, A., catalytic action of monoses on the formaldehyde condensation. I. and II., A., 733, 1224.
- Kuzin, M. G. See Model, L. M.
- Kuzin, S. A., application of flotation to separation of salt mixtures into their constituents, B., 268. Separation of borax and boric acid by flotation from mixtures of salts, B., 722.
- Kuzmin, G. A. See Laschkarev, V. E.
- Kuzmin, L. L., and Postnikov, V. F., reaction of sulphur dioxide with water under pressure, B., 1091.
- See also Postnikov, V. F.
- Kuzmina, K. A. See Kiselev, N. N.
- Kuzmina, L. I. See Mindlin, S. S.
- Kuzmina, N. A. See Orechovitsch, V. N.
- Kuzminich, I. N., Jachontova, E. L., and Surkov, E. I., kinetics of absorption of oxides of nitrogen by sulphuric acid, A., 308.
- Lukina, M. T., and Narkevitsch, M. M., ural flotation pyrites, B., 25.
- and Surkov, E. I., denitration of nitrosyl-sulphuric acid, B., 20.
- and Udintzeva, V. S., reaction between nitrogen dioxide and water vapour, A., 715.
- and Yudina, V., influence of gas velocity on rate of absorption of nitrogen oxides by sulphuric acid, B., 402.
- Kuzminuikh. See under Kuzminich.
- Kuznetsov, D. I. See Nikolaev, V. I.
- Kuznetsov, M., desulphurising coke, B., 6.
- Production of coke from lignite, B., 707.
- and Belov, K., low-boiling phenols from low-temperature tar, B., 391.
- Pantchenko, S. I., and Kagan, G. B., berginisation of anthracene fraction of coal tar, B., 790.
- Kuznetsov, S. I., microbiological studies in the irrigated regions of Transcaucasia and Turkestan, B., 164. Microbiological characteristic of soils in some districts of Transcaucasia, B., 687. Microbiology of soils of the Frunze Zondl Experimental Station, B., 687.
- Kuznetsov, V. D., and Degtiarev, M. M., investigation by the optical method of the elastic limit of rock-salt crystals as a function of the rate of increase of the deformative force, A., 1311.
- Kuznetsov, V. G. See Kurnakov, N. S.
- Kuznetzova, M. G., synthesis of thymol-glycuronic acid on an acid and alkaline diet, A., 1530.
- Kuznezova-Zarudnaya, T. N. See Yakimov, P. A.
- Kvalnes, D. E., optical method for study of reversible organic oxidation-reduction systems. IV. Aryl-*p*-benzoquinones. V. *o*-Benzoquinones, A., 86.
- Kvater, G. S., anomalous dispersion in thallium vapour, A., 1184.
- Kvitnizki, A. B. See Budnikov, P. P.
- Kwasnik, W. See Ruff, O.
- Kwiatkowski, B. See Urbański, T.
- Kwiatkowski, H., acetylcholine content of nerves, brain, and spinal cord, A., 376.
- See also Ammon, R., and Feldberg, W.
- Kwieciński, L. See Dziewoński, K.
- Kwinichidze, M., pure and mixed sowings of peas, oats, and lupins as factors in the utilisation of phosphatic manures, B., 966.

- Kwit, N. T. See Hatcher, R. A.
 Kyburz, C. See Hanslin, M.
 Kydd, D. M., Bence-Jones protein in serum, A., 236.
 See also Robbins, C. L.
 Kylin, E., combination of tetanus- and diphtheria-toxin with blood-proteins, A., 105. Colloid-osmotic (oncotic) pressure. XXXII. Can displacement of colloid-osmotic pressure be responsible for lowering of water excretion in pernicious anemia? A., 774.
 See also Kjellin, T.
 Kyogoku, K. See Yamasaki, Kazami.
 Kyriakidis, P. See Perrakis, N.
 Kyrides, L. P., compositions comprising cellulose derivatives or resins, (P.), B., 194.
 and Monsanto Chem. Co., aromatic carboxylic acids, (P.), B., 621. Octoic acid derivatives of phenols, (P.), B., 761. Ester of hydroxybenzoic acid, (P.), B., 940.
 See also Nat. Aniline & Chem. Co.
 Kyte, J. H., and Swedish Iron & Steel Corp., [surface] carbonisation of ferrous metal, (P.), B., 314.
 Kyn, K., pharmacology of arecoline, A., 1156.
- L
- Laabs, W., and Packers Equipment Development Co., [dry]-rendering of fatty materials, (P.), B., 68.
 Laaksonen, A. See Kilpi, S.
 Laar, J. See Weibke, F.
 Laar, J. J. van, can the ordinary attractive forces between the molecules or atoms of a substance in absence of polarity (dipoles, etc.) be accounted for by electrical forces? A., 810.
 Laas, H. See Kimmelsiel, P.
 Laass, P. See Tammann, G.
 Laatsch, W., profile diagrams as standards for soil mapping and evaluation, B., 323. Classification of German ground-water-free soil types from the viewpoint of examinations of the complex, B., 565.
 La Barre, J., physiological variations in internal secretion of the pancreas. XIII. Internal pancreatic secretion during experimental hyperaminoacidemia, A., 127.
 and Destrée, P., modifications of gastric secretory activity under the influence of parathyroid extracts, A., 789. Gastric motility in experimental hyperaminoacidemia, A., 1020. Secretory function of the stomach in the course of experimental hyperaminoacidemia, A., 1146.
 and Goffin, R., chologogue action of secretin and derivatives, A., 901.
 and Houssa, P., effects of adrenaline hydrochloride on blood-sugar of hepatotomized dogs, A., 665. Duodenal secretion and sugar metabolism, A., 1006. Effect of ineretin on glycogen reserve of the liver in the rabbit, A., 1172.
 and Ledrut, J., action of ineretin on glycosuria of depancreatized dogs, A., 410. Glucose content of blood from femoral artery and vein during hypoglycemia provoked either by secretin or by ineretin, A., 538. Action of pepsin on succagolic and hypoglycemic activity of secretin, A., 788.
- La Barre, J. See also Zunz, E.
 Labarre, Jules, and Riopel, P., effect of halogenated acids on glycolysis of blood *in vitro*, A., 373.
 See also Laurence, J.
 La Barre, L. See Zunz, E.
 Labarthe, J., jun., Tressler, D. K., and Mathieson Alkali Works, Inc., beeswax substitutes, (P.), B., 1127.
 Labbé, A., silicigenous functions of silicodermis, A., 893.
 Labbé, M., Violle, P. L., and Nepveux, F., intermediary metabolism of purines in gout, A., 1149.
 Labes, R., and Billmann, F., colloidal chemical properties of chemotherapeutically active substances and their relationship to constitution, A., 120.
 and Krebs, K., action of poisons on the dehydrogenases and oxidases of muscle, A., 1277.
 Laboratoires Français Chimiothérapie, Girard, André, and Sandulesco, G., manufacture and application of new reagents [for the carbonyl group], (P.), B., 840.
 Labour, G. See Geoffrey, R.
 Labriola, G. See Wieland, H.
 Labriola, R. A., free radicals, A., 1125.
 See also Zappi, E. V.
 Labro, L. See Delépine, M.
 Labuntzov, A. N., age of uraninite and monazite from pegmatite seams in North Carolina, A., 841.
 Labus, O. A., treatment of vermiculite, (P.), B., 899.
 Labutin, S. V., alumina from alunites, B., 990.
 Laby, T. H. See Christiansen, W. N., and Martin, L. H.
 Labzin, G., tanning with pretreatment of hides with buffer solutions, B., 114.
 Lacassagne, A., and Servigne, M., localisation of polonium in the organism as a function of the nature of the injected solution, A., 531.
 Lacey, B. W. D. See Dunlop Rubber Co.
 Lacey, C. F. See Walton, R. P.
 Lacey, R. See Edwards, K. B.
 Lacey, W. N., and Woods, H., heat and material balances for a rotary cement kiln, B., 591.
 See also Hill, E. S., and Sage, B. H.
 Lachat, L. L., determination of vitamin-D. II. Effect of seasonal variation and sex on calcification in rachitic chicks, A., 417.
 Lacher, L., Niederreither, H., and Lawaczek Ges.m.b.H., arrangement in multi-cell electrolyzers, (P.), B., 958.
 Lachmeyer, E., rôle of manganese in steels, B., 677.
 Lachno, E. V., phosphorus and nitrogen compounds in fish muscle, A., 1522.
 Łachociński, Z., and Tomasik, Z., composition of Polish gasolines, B., 133.
 Lachs, H., and Minkow, I., surface tension of heavy water, A., 1059.
 and Sobieraj, Z., adsorption on homogeneous surfaces, A., 293.
 Lackey, R. W., and Bailey, J. R., nitrogen compounds in petroleum distillates. VIII. Degradation of the naphthenic base, C₁₄H₂₅N, to the lower homologue, C₁₃H₂₁N, A., 357.
 LaCoste, L. J. B. See Colby, M. Y.
 Lacourt, (Mlle.) A. See Wuyts, H.
 Lacquet, A., De Nayer, P., and Bouckaert, J. P., effect of insulin on amino-acid metabolism, A., 127.
 See also Delrue, G.
- Lacroix, A., tektites without figured shapes from Indo-China, A., 1102.
 Lacroix, J. See Clarens, J.
 Lacroute, P., Zeeman effect in bromine and iodine, A., 271.
 Lacto-Yeast Co., Inc. See Owen, W. L.
 Lacy, B. S. See Du Pont de Nemours & Co., E. I.
 Lacy, G. See Glidden Co.
 Ladenburg, R., mass of the neutron and stability of heavy hydrogen, A., 1295.
 Ladvez, E. E. See Borisuk, J. G.
 Längauer, D. [with Pawlak, W.], treatment of langbeinite. I. Velocity of solution of native langbeinite, B., 145.
 Laer, M. H. van, influence of copper on yeast, B., 202. Hop extracts, B., 569.
 Laeverenz, P. See Vogel, L.
 Lafitte, M. N. See François, M. T.
 Lafitte, P., and Grandadam, P., platinum oxides, A., 462. Nitridation of metals, B., 554.
 See also Blondel, R., Elchardus, E., and Locuty, P.
 Lafontaine, G. H., beater sizing [for paper], B., 299.
 LaForge, F. B., and Haller, H. L., constituents of pyrethrum flowers. II. Isolation of pyrethrin-II, A., 1550.
 See also Haller, H. L., and Smith, L. E.
 Lafuma, H. See Dubrisay, R.
 Lagatu, H., and Maume, L., variations in the sum, N+P₂O₅+K₂O per cent. of the dry matter of leaves in cultivated plants, A., 672. Leaf diagnosis of tobacco: comparative effects of basic slag, superphosphate, and basic phosphate on nitrogen-phosphorus-potassium equilibrium, B., 422.
 Lageder, K., porphyrin metabolism; spectroscopic determination of porphyrins, A., 1007.
 Lagergreen, A., removal of phenol from surface waters, B., 880.
 Laget, E., colorimetric determination of traces of copper with sodium diethyldithiocarbamate, A., 837.
 Lagneau, E. See Schmidt, J.
 Lagrange-François, M., passage of vegetable or animal material into milk, A., 379.
 Lagrave, J., and Hudeley, V., [optical projection printing system for] colour photography and cinematography, (P.), B., 207.
 Lahay, F. H. See Joslin, E. P.
 Lahiri, J. K. See Brady, O. L.
 Lahr, E. L. See Bates, R. W., and Riddle, O.
 Lahr, G. See Vollrath, K.
 Lai, D. G., glucose tolerance test in leprosy, A., 1149.
 Laibach, F., and Fischnich, O., artificially induced root formation by means of growth-substance paste, A., 1038. Method for determining callus-forming action of pastes containing growth-promoting substance, A., 1039.
 Laidler, K. See Godlewicz, M.
 Lainé, P., ozone and its magnetic properties, A., 814.
 Laine, T. See Virtanen, A. I.
 Lainer, V. I., and Majantz, A. D., separation of metals from their solutions by the action of organic reducing agents under pressure, A., 591.
 Natanson, E. V., and Orionov, A. A., precipitation of copper under pressure by means of organic reducing agents, A., 312.
 Laing, E. V., tree roots, B., 372.
 Laing, G. H. See Jones, K. K.

- L'Air Liquide, Société Anonyme pour l'Étude & l'Exploitation des Procédés G. Claude, liquid-oxygen explosives, (P.), B., 335, 751. Krypton and xenon from atmospheric air, (P.), B., 900.
- Laird, F. W., and Smith, M. *Alonza*, paracher and structure of nickel carbonyl, A., 432.
- Laissus, J., cementation of ferrous alloys with beryllium, B., 311.
- and Heim, R., effect of illuminating gas on vegetation, B., 515.
- Laitakari, A., heavy minerals in Finnish rocks. III. Kakola granite, A., 1100.
- Laithwaite, H. See Howes, H. W.
- Laitinen, L. See Kauko, Y.
- Laki, K., significance of fumaric acid in respiration of animal tissues. III. Oxidation and reduction of C₄ dicarboxylic acids, A., 1406.
- Lakin, T. See Sinclair, I. S.
- Lakshminarayana, A. K. See Dey, B. B.
- Lal, J. B., uranium in organic synthesis. II., A., 1487.
- and Dutt, S., yellow colouring matter from the wood of *Adina cordifolia*, Hook, A., 1129. *Butea frondosa* flowers; isolation of a crystalline glucoside of butin, A., 1181. Metallic uranium in organic synthesis. I., A., 1357.
- Lal, K. N. See Singh, B. N.
- Lal, S. See Chopra, R. N.
- Lalande, A., cryoscopy in concentrated solution at a low temperature; method of successive equilibria, A., 57. Condensed phase equilibria in the system water-alcohol-ether, A., 303.
- LaLande, W. A., jun. See Butz, L. W.
- Lalin, G. S., and Aktieb. Vallevikens Cementfabr., cements, (P.), B., 950.
- Lallemand, A., influence of physical state on magnetic properties of some salts of the iron group, A., 436.
- Lallemand, (Mme.) S., water thermostat, A., 1474.
- Lamar, E. S. See Morse, P. M.
- La Master, J. P., Elting, E. C., and Mitchell, J. H., calcium and phosphorus assimilation by dairy cows, A., 393.
- Lamb, F. W. See Winter, O. B.
- Lamb, I. D., and Smith, Sybney, strophanthin of *Strophanthus emini*, B., 606.
- Lamb, J., theory and practice of tea drying, B., 747.
- Lamb, M. C., sampling of leather for analysis, B., 601.
- Lamb, S. A. See Thompson, Harold W.
- Lamb, V. A. See Cornog, J.
- Lambert. See Lécorché.
- Lambert, E. B., and Crandall, B. S., *Phytophthora* wilt of black locust seedlings, B., 568.
- Lambert, H. See Mrak, E.
- Lambert, J. L., examination of coals for production of blast-furnace coke, B., 659.
- Lambert, P. See Andant, A.
- Lambert, W., manganese bronze and brass, B., 361.
- Lambillon, J., synthetic ephedrine [isomeride], A., 81. Pharmacodynamic action of the benzylcholines, A., 894.
- See also Schockaert, J. A.
- Lamboit, P. See Dufoyecolor, Ltd.
- Lambourne, J., Malayan soils. IV. Conditioning of infertile soil, B., 35.
- Lambrechts, A., phloridzin and muscles of the dog *in vivo* and *in vitro*, A., 653.
- and Barac, G., spectrophotometric study of the diazo-reaction of the blood, A., 1000.
- Lambrechts, A. See also Brull, L.
- Lambret, O., and Driessens, J., histological modifications at the surface of the graft and the spleen in the course of regression of the Jensen sarcoma under the action of insulin, A., 1526. Hyperpolypeptidemia induced by intraperitoneal injections of peptone in the rabbit, A., 1532.
- Lambrey, M., decomposition of nitric esters at low temperatures, A., 829.
- La Mer, V. K., and Armbruster, M. H., micro-quinhydrone-silver chloride cell for precision e.m.f. studies on heavy water, A., 1218.
- and Baker, W. N., f.p. of mixtures of H₂O and H₂O₂; latent heat of fusion of H₂O, A., 167.
- and Greenspan, J., extraction method for determination of acids and its application to *p*-hydroxybenzoic acid, A., 947.
- and Korman, S., e.m.f. of quinhydrone electrode in heavy water; acidic dissociation of deuterioquinone, A., 1205.
- See also Baker, W. N., Greenspan, J., Hamill, W. H., Marlies, C. A., and Shrawder, J., jun.
- Lameris, A. J. See Coster, D.
- Lameris, A. T. See Dijk, E. W. van.
- Lamie, R. D. See Reed, Harry S.
- Lamm, O., gas absorption apparatus based on the dispersion principle, A., 599.
- Lammeren, J. A. van, second virial coefficient and specific heats of oxygen, A., 1197.
- See also Keesom, W. H.
- Lammers, F. J., water purification in the modern brewery and distillery, B., 76.
- Lamort Fils, E. & M., paper pulp, (P.), B., 301. Apparatus for manufacture of paper pulp, (P.), B., 491.
- Lamour, P. See Polonovski, M.
- Lampe, B., determination of water in potato flakes, B., 204. Determination of extract content in viscous mashes, B., 1016.
- and Deplanque, R., distillation of liquids rich in extract or containing draft, B., 170. Potatoes evaporated at high temperatures, B., 171. Fusel oil from fermented mashes, B., 284. Diastase and determination of diastatic power, especially in green malt, B., 519. Extraction of diastase from green malt by addition of sodium chloride, B., 695. Protein content and diastatic power in green barley malt, B., 744. Modified Windisch-Kolbach method for determination of diastatic power of green malt, B., 779. Acidity, *pH*, and colour of potato flakes, B., 971. Determination of fibre in potato flakes, B., 1066. Alteration in alcohol content [of spirits] after prolonged keeping in hydrometer cylinder, B., 1113.
- Lampe, W., and Taczanowska, J., dyeing properties of dicinnamoylmethane derivatives, A., 347.
- and Trenknerówna, M., [attempted] synthesis of 2:2'-dihydroxydicinnamoylmethane, A., 353.
- Lampert, U. See Helderich, B., and Hükel, W.
- Lampferhoff, W. See A.-G. für Internat. Patentverwertung.
- Lampitt, L. H., Sylvester, N. D., and Bilham, P., irradiation of fats. I. Standard method of use of ultra-violet light, B., 558.
- See also Sylvester, N. D.
- Lamson, P. D., and Brown, H. W., anthelmintic studies of alkylhydroxybenzenes. III. 6-*n*-Alkyl-*m*-cresols, A., 529.
- Brown, H. W., and Harwood, P. D., anthelmintic properties of certain alkylphenols, A., 1159.
- Brown, H. W., Stoughton, R. W., Harwood, P. D., Baltzly, R., and Bass, A. D., anthelmintic studies of alkylhydroxybenzenes. II. *o*- and *p*-*n*-Alkylphenols. IV. Isomerism in poly-alkylphenols. V. Phenols with other than *n*-alkyl side-chains, A., 529.
- Brown, H. W., and Ward, C. B., anthelmintic studies of alkylhydroxybenzenes. I. Alkylpolyhydroxybenzenes, A., 529.
- Molloy, D. M., and Brown, H. W., anthelmintic action of *o*-heptylphenol and 6-hexyl-*m*-cresol against *Ascaris lumbricoides*, *Neutor americanus*, and *Trichuris trichiura*, A., 1412.
- See also Brown, H. W.
- Lancaster Asphalt, Inc. See Robinson, T.
- Lancaster Processes, Inc. See Robinson, T.
- Lance, A. E., liquid oxygen explosives, (P.), B., 926.
- See also Lightfoot Refrigeration Co., Ltd.
- Lancefield, S., bacteriology of [food] canning. II.—V. VI. and VII. Cultural details of the more commonly occurring organisms. VIII. Food-poisoning bacteria. X. Preparation and care of culture media. XI. Preparation and use of culture media. XII. Staining of micro-organisms for microscopical examination. XIII. Special methods for staining flagella, B., 44, 173, 379, 476, 521, 574, 652, 827, 1021, 1162.
- Lancelot, E. See Guittonneau, G.
- Lancetot, J., control of [photographic] graininess, B., 1069.
- Lánczos, A., liberation of calcium by stimulation of heart nerves, A., 524. Effect of cold on fat and carbohydrate contents of the liver, A., 1264.
- Land, E. H., colloidal suspensions [of herapathite], (P.), B., 174, 783*.
- Land, W. E. See Patrick, W. A.
- Landau, G. See Guertler, W.
- Landau, L., and Lifschitz, E., production of electrons and positrons by collision of two particles, A., 677.
- Landauer, W., Upham, E., and Rubin, F., creeper fowl. VIII. Effect of bone extract on skeletal growth and phosphatase content of the bones, A., 393.
- Landé, A., magnetic moment of the proton, A., 144.
- Landelius, E., and Ljungkvist, G., effect of vitamin-D on oxygen consumption of growing rats, A., 129.
- Lander, C. H. See Broeklebank, E. W.
- Lander, F. P. L., and MacLagan, N. F., histamine test-meals on normal students, A., 116.
- Lander, G. D., sewage. III. Chemical aspect, B., 1168.
- Landes, K. K., beryl-molybdenite deposit of Chaffee County, Colorado, A., 725. Age and distribution of pegmatites, A., 726. Colorado pegmatites, A., 1100.
- Landes, W. See Moskowitz, S.
- Landgraf, A., measurement of large amounts of hydrogen sulphide in lignite-distillation gases in Hempel method of volumetric gas analysis, B., 390.

- Landis, Q., [determining] an index of proteolytic activity by use of the farinograph, B., 425.
- Frey, C. N., and McHugh, S. A., diastatic supplements for A.A.C.C. baking test. II., B., 651.
- Landolt, C. See Schweizer, E.
- Landon, M., factors in autoxidation of ether, A., 454. Oxidation of ether in presence of active carbon. II. Reactions and determination of oxidised ether, A., 456.
- See also Demougin, P.
- Landon, N. R., Collins, E. F., jun., and Delaware, Lackawanna, & Western Coal Co., treatment of coal, (P.), B., 212.
- Landouzy, P., apparatus for fermentation of liquids, (P.), B., 42.
- Landquist, J. K. See Drew, H. D. K.
- Landsberg, J. W., and Thompson, Marvin R., guinea-pig as a hæmatopoietic test animal, A., 107.
- Landsteiner, K., and Chase, M. W., decomposition of group-A substances, A., 1420. Decomposition of group-A substance in horse saliva by a myxobacterium, A., 1420.
- and Scheer, J. van der, serological studies of azo-proteins: antigen-containing azo-compounds with aliphatic side-chains, A., 881. Serological specificity of peptides. II., A., 882.
- Landt, E., theory of lyosorption phenomena, A., 31. Determination of dipole moment of sucrose, A., 148. Mercury-[vapour] lamp for colour measurements [on sugar products], B., 283. Viscosity of concentrated sugar solutions, B., 870.
- Landt, G. E., and Hausmann, E. O., initial inflammability of [fibrous] construction materials, B., 592.
- See also Soc. Chem. Ind. in Basle.
- Landwirtschaftliche Genossenschaft zur Verwertung der Harzprodukte in Piesting Registr. Genoss.m.b.H., size rosin for papermaking industry, which is solid, readily soluble, and rich in free rosin, (P.), B., 368.
- Lane, A. C., Killarney and earlier granite, A., 1100.
- Lane, C. B., and Hammer, B. W., bacteriology of cheese. I. Effect of pasteurising milk on nitrogenous decomposition in Cheddar cheese, B., 825.
- Lane, C. E., influence of cestrin on pituitary-gonad complex of the immature female rat, A., 902.
- and Greep, R. O., follicular apparatus of the ovary of the hypophysectomised immature rat and effects of hypophyseal gonadotropic hormones on it, A., 1426.
- Lane, C. T., size and arrangement of bismuth micro-crystals formed from vapour, A., 1195. Magnetic properties of Rochelle salt, A., 1312.
- Lane, E. C., and Garton, E. L., "base" of a crude oil, B., 1081.
- Lane, M. C., wireworm control, B., 248.
- Lane, R. P., and Day, E. L., cotton and cottonseed, B., 374.
- Lane Construction Corporation. See Schutte, A. E.
- Lanean, R., distinguishing between top- and bottom-fermentation yeasts with the aid of blood-serum agglutinin, B., 1016.
- Lang, A. See Bunte, K.
- Lang, F. R., and Crown Central Petroleum Corp., lubricating oil, (P.), B., 760.
- Lang, J. See Perkin, H. J.
- Lang, J. W., analysis of complex gaseous mixtures, using a combination of the Poddelniak distillation column and the Shepherd apparatus, B., 612.
- and Morgan, J. J., pyrolysis of propane in presence of water vapour, A., 1221.
- Lang, K., composition of serum-proteins in Bence-Jones albuminuria, A., 886.
- Lang, O. See Grassman, W.
- Lang, Richard, forest manuring. II., B., 245.
- Lang, Rudolf, volumetric determination of manganese by induced oxidation of Mn^{II} salts to Mn^{III} metaphosphoric acid [complex], A., 1094.
- Lang, R. J., spectrum of niobium IV, A., 137. Spectrum of trebly-ionised cerium, A., 1183.
- Lång, S., glutathione and autolysis, A., 1163.
- Lang, W. A. See Stansfield, E.
- Langdon, R. R., dry colours, B., 69.
- Langé, B., uses of photo-electric apparatus in chemistry, B., 558.
- and Voos, E., photo-electric temperature regulator, A., 721.
- Lange, E., changes of matter and their arrest, A., 432.
- and Nagel, K., matter-current-work relationships in ideal electrochemical polyphase systems: Faraday's law of electrolysis in ideal galvanic cells, A., 1205.
- See also Doeblemann, E., and Hohn, H.
- Lange, (Mlle.) Frédérique. See Delépine, M.
- Lange, Fritz (Berlin). See Brasch, A.
- Lange, Fritz (München), demonstration of the fourth depressor substance in human urine and blood, A., 895.
- Lange, F. E. M., and Nord, F. F., cryolysis, diffusion, and particle size. I. Experiments with sodium oleate, ovalbumin, and polyacrylic acid, A., 932.
- See also Nord, F. F.
- Lange, Heinrich. See Weber, F.
- Lange, Herbert, optical constants of rhodium and gallium at the wave-lengths 589 and 436 mμ, A., 814.
- Lange, J., determination of formaldehyde and formic acid in admixture in presence of iodic acid, B., 181.
- and Paris, R., preparation of trisodium periodate and periodic acid, A., 716.
- Lange, L. H., flotation of free gold, B., 996.
- Lange, N. A. See Vopicka, E.
- Lange, W., preparation and properties of fluorine compounds, A., 715. Discoloration of silver iodide by aqueous ammonia, A., 943.
- and Askitopoulos, K., salts of hexafluoro-antimonic acid, $HsBF_6$, A., 1213.
- Langebeck, H. H., carbon loss and pick-up in the cupola, B., 409.
- Langebeck, W., [esterase models], A., 784. Synthesis of synthetic enzymes, A., 1023.
- Langenberg, F. C., Reddick, H. G., and United States Pipe & Foundry Co., cast iron annulus [pipe], (P.), B., 503.
- United States Pipe & Foundry Co., and Crucible Steel Co. of America, ferrous alloy [chromium steel], (P.), B., 679. Compounding of corrosion-resisting forgeable ferrous alloys, (P.), B., 679.
- Langendorff, H. See Broili, H.
- Langenscheidt, F., extraction of gold from gold-bearing ores, (P.), B., 810.
- Langenwalter, H. W., back diffusion of and excitation of secondary radiation by slow cathode rays at thin metallic layers, A., 1439.
- Langer, D. See Baer, E.
- Langer, E. O., determination of [light-] filter factor by the counter-wedge difference method, B., 575.
- Langer, K., effect of mercerisation (with stretching) on tensile strength and extensibility of cotton yarn, B., 847. Effect of mercerisation on tensile strength, length, and fineness of cotton fibres, B., 847. Determination of oil content of oiled viscose rayon, B., 1087.
- Langeron, R. M., mass of the neutron, A., 1295. Theory of the origin of cosmic radiation, A., 1297. Interaction between neutrons and protons, A., 1297. Excitation and disintegration of protons and the neutret, A., 1442.
- and Raitt, R. W., new kind of radioactivity, A., 6. Radioactivity of beryllium, A., 6.
- Langeron, L., Paget, M., and Ledieu, J., determination of chlorine in the nervous centres, A., 772.
- Langford, G. S. See Cory, E. N.
- Langlands, I. See Dadswell, H. E.
- Langley, W. D., and Albrecht, A. J., identification of flavinates of various organic bases, A., 639.
- Langlykke, A. F., Peterson, W. H., and McCoy, E., products of fermentation of glucose and arabinose by butyric acid anaerobes, A., 1167.
- Langseth, A., and Nielsen, J. R., polarisation and intensity measurements in the Raman spectrum of carbon dioxide, A., 145. Raman spectra of some linear triatomic molecules, A., 145.
- Nielsen, J. R., and Sørensen, J. U., Raman effect of triatomic molecules. V. Constitution of N_3' and NCS' ions, A., 11.
- and Qviller, B., ultra-violet absorption spectrum of osmium tetroxide, A., 9.
- and Walles, E., Raman effect with triatomic molecules. VI. Constitution of nitrite ion, A., 145.
- See also Kilit, A.
- Langstroth, C. B., and Martin, E. M., [arc]-welding electrode, (P.), B., 1001.
- See also Martin, E. M.
- Langstroth, G. O., excitation of band spectra: rotational structure, A., 423. Excitation and emission in nitrogen band spectrum, A., 907.
- Langwell, H. See Brit. Industrial Solvents, Ltd.
- Langworthy, M. L. See Texas Co.
- Lanik, J. See Némec, A.
- Lanin, V. A. See Klimov, B. K.
- Lankelma, H. P. See Standard Oil Co.
- Lankosz, J. See Franke, M., and Malczynski, S.
- Lanning, J. G. See Ulmer, H. M.
- Lanning, J. H., temperature changes in small laboratory oven when drying flour by the 130° C. oven method, B., 426.
- Lansing, A. C., detection of benzene in alcohol, B., 617.
- Lansing, W. D., and Kraemer, E. O., mol. wt. of linear macromolecules by ultracentrifugal analysis. III. Mol. wt. analysis of mixtures by sedimentation equilibrium in the Svedberg ultra-centrifuge, A., 1073.
- See also Aughey, W. H., Hunt, J. K., and Kraemer, E. O.
- Langston Monotype Machine Co. See Bassist, E.

- Lanthier, P., anhydrous copper sulphate containing potassium or sodium sulphate, (P.), B., 948.
- Lantz, E. M., and Smith, Margaret C., effect of fluorine on calcium and phosphorus metabolism in albino rats, A., 399.
- Lantz, L. A. See Calico Printers' Assoc.
- Lantz, R., mechanism of monosulphonation of naphthalene, A., 1116.
and Wahl, A., preparation and reactions of naphthaphenoxazines, A., 633.
- Lanz, P. See Duttweiler, G.
- Lanz, Akt.-Ges., H. See Sipp, K.
- La Parola, G., action of maleic anhydride on aldehydo-amine bases, A., 491. Condensations between maleic anhydride and phenylhydrazones, A., 1489.
- Lapeyre, F., reduction of positives of mosaic tricolour [photographic] films, B., 878.
- Lapin, N. P., Charlamov, V. N., and Goniev, G. S., copper-plating of iron at high current densities, B., 1050.
- Vilamovich, E. T., and Dmitrieva, M. I., comparative study of various electro-galvanising solutions and properties of zinc coatings obtained, B., 1050.
- Laporte, R. See Boquet, A.
- Laporte, Ltd., B., and Weber, I. E., bleaching of vegetable fibres, (P.), B., 1042.
- Lapp, C., specific rotatory power of salts of quinine, quinidine, cinchonine, and cinchonidine, A., 1256. Specific rotatory power and stereochemistry of *Cinchona* alkaloids, A., 1256.
- Lapp, F. W., and Dibold, H., blood-sugar in internal disease, A., 1010.
- Laptev, N. G., sulphuric acid as catalyst for ethylation of arylamines by alcohol, B., 137.
- La Que, F. L., and Internat. Nickel Co., Inc., dyeing of silk-containing textiles, (P.), B., 401.
- Laquer, F., Döttl, K., and Friedrich, H., gonadotropic anterior-pituitary hormone (prolan), A., 128.
- Laqueur, E. See David, K., De Jongh, S. E., Dingemans, E., and Heyl, J. G.
- Larchar, A. W. See Du Pont de Nemours & Co., E. I.
- Lardé, R. See Hazard, R., and Lesné, E.
- Lardy, G., and Du Pont Rayon Co., [sizing of] textile material, (P.), B., 1091.
- Large, J. R., jun. See Demaree, J. B.
- Larin, P. S. See Rozenberger, N. A.
- Larina, V. A. See Stadnikov, G. A.
- Larjuschkina, I. K., application of acid dyes for printing on paper, B., 143.
- Lark-Horovitz, K., and Babcock, C. L., viscosity and conductivity of molten glasses, A., 157.
and Madigan, S. E., crystallisation of polymorphous substances. I., A., 151.
and Miller, E. P., X-ray diffraction of liquid films, A., 18.
- Purcell, E. M., and Yearian, H. J., electron diffraction from vacuum-sublimed layers, A., 1309.
and Yearian, H. J., new electron diffraction rings in zinc oxide and their interpretation, A., 18.
- Larke, (Sir) W. J., iron and steel, B., 807.
- Larkin Co., Inc. See Hoyt, L. F.
- Larmour, H. M., and Pierce, S. C., jun., Portland cement, (P.), B., 769. Grinding of Portland cement, (P.), B., 769.
- Larmour, R. K., Clayton, J. S., and Wrenshall, C. L., respiration and heating of damp wheat, B., 697.
- Larmour, R. K., and Geddes, W. F., comparison of harvesting methods in respect to moisture content and grade of the grain, B., 697.
- Geddes, W. F., Malloch, J. G., and McCalla, A. G., moisture changes in standing grain, B., 1157.
See also Clayton, J. S.
- Larrabee, M. G. See Lucké, B.
- Larsen, A., apparatus for washing dust from gases, (P.), B., 1077.
- Larsen, B. M. See Heindlhofer, K.
- Larsen, C. J. See Hanovia Chemical & Manufacturing Co.
- Larsen, D., and Heyl, F. W., α - and β -spinastanol, A., 210.
- Larsen, K. D. See Rank, D. H.
- Larsen, L. S., paint-hardening and drying compound, (P.), B., 367.
- Larsen, N. P., Jones, M. R., and Pritchard, G. P., dental decay as indicator of dietary fault, A., 1148.
- Larsen, R. G. See Kinney, C. R., and Kohler, E. P.
- Larsen, W. E., and Hunt, H., liquid ammonia as solvent. IV. Activities of ammonium nitrate, iodide, bromide, and chloride at 25°, A., 1077.
- Larson, A. T. See Du Pont de Nemours & Co., E. I.
- Larson, C. See Sundelin, G.
- Larson, C. E. See Greenberg, D. M.
- Larson, C. M. See Baxley, C. H.
- Larson, E. J. See Barnes, T. C.
- Larson, H. W. See Blatherwick, N. R.
- Larson, L. L. See Grasselli Chem Co.
- Larson, P. S., alleged occurrence of acetylcholine and adrenaline in cat's saliva, A., 1146.
and Chaikov, I. L., effect of insulin on excretion of allantoin by the normal dog, A., 538.
See also Chaikov, I. L.
- Larson, R. H. See Walker, J. C.
- Larsson, E., thiodisobutyric acids, A., 197.
- Larsson, H., significance of diffusion in concentration cells, A., 584.
- Lary, E. C., and Davis, D. S., effect of p_H on freeness of chemical and groundwood pulps, B., 845.
- Lasarev, B. G. See Fakidov, I., and Komar, A.
- Lasarev, V., (C-C) diamond linking energy, A., 1058. Electronic states of the carbon atom and calculation of binding energies, A., 1058.
See also Goldfinger, P., and Henri, F.
- Lasby, H. A., and Palmer, L. S., nutritional anemia, calcium, phosphorus, and nitrogen balance of rats fed raw vs. pasteurised milk, A., 1147.
- Lasch, F., effect of vitamin-A on serum-cholesterol in man, A., 1034.
and Roller, D., toxicity of concentrated salt solutions, A., 1534.
- Laschkarev, V. E., inner potentials of crystals and electron diffraction, A., 1308.
and Chaban, A. S., absorption factor in electron diffraction, A., 687.
and Kuzmin, G. A., influence of temperature on diffraction of slow electrons by a graphite crystal, A., 687.
- Laschtschenko, P. N., and Kompanski, D. I., critical points of transformation of difficultly fusible oxides, and of their hydrates, at high temperatures, A., 1204.
- Laser, H., metabolism of retina, A., 1150.
- Láska. See Byčichin.
- Lasker, M. See Enklewitz, M.
- Laskey, N. See Friedlander, M.
- Laskowski, M., phosphorus compounds in blood-plasma of the laying hen, A., 374. Isolation of serum-vitellin, A., 1002.
- Lasky, S. G., igneous assimilation and associated contact metamorphism in the Virginia mining district New Mexico, A., 1479.
- Lasnitzki, A., importance of cations in energy metabolism of warm-blooded cells, especially tumour cells, A., 392.
and Szörényi, E., influence of alkali cations on fermentation capacity of yeast, A., 534.
- Lassak, E. See Kirpal, A.
- Lassberg, von, spiral heat exchanger, B., 705.
- Lasse, K., pressure loss and dead space in [beet] diffusion batteries, B., 692.
- Lassek, H., influence of pretreatment and subsequent rolling on properties of cold-rolled band steel, B., 676.
See also Kayseler, H.
- Lassen, H., and Brück, L., preparation of thin single crystals of silver and their investigation with electron beams, A., 286, 922.
See also Kirchner, F.
- Lasseur, P., and Benoit, M., gram staining method, A., 257.
and Renaux, M. A., agglutination of various bacteria by lemon juice, A., 257.
- Lassiat, R. C., and Houdry Process Corp., temperature control of catalytic reactions, (P.), B., 1073. Temperature regulation of catalytic converters, (P.), B., 1073.
See also Houdry Process Corp.
- Lassieur, A. See Kling, A.
- Łaszkiewicz, A., crystallography and structure of hexamethylenetetramine salicylate, A., 1061.
- Laszlo, D., Urban, H., and Weissenberg, E., cerebral blood in conscious and narcotised men, A., 1516.
- Laszt, L., phosphorylation of various sugars by extracts of intestinal mucous membrane, A., 521. Absorption of glucose and xylose at different p_H , A., 522.
and Süllmann, H., production of phosphoric esters in the intestinal mucous membrane during resorption of sugars, glycerol, [and fat], A., 1017.
See also Verzár, F.
- Latarjet, R., influence of variations of atmospheric ozone on biological activity of solar radiation, A., 895. Atmospheric ozone and heliotherapy, A., 1022.
- Latchem, W. E. See Garner, W. E.
- Latham, D. S. See Russell, W. W.
- Latham, H., acid-resisting pump, (P.), B., 706.
- Lathbury, K. C., relation between biological, chemical, and physical methods of vitamin-A determination, A., 414.
- Lathrop, E. C., Irvine, F. A., and Celotex Co., water-repellent size for fibre products, (P.), B., 186. Utilisation of fibrous material, (P.), B., 721.
- Latimer, W. M., Hull, D. E., and Libby, W. F., radio-caesium activated by neutrons, A., 678.
and Young, H. A., isotopes of hydrogen by magneto-optic method; existence of H³, A., 149. Isotopes of calcium by the magneto-optic method, A., 149.

- Latimer, W. M. See also Hull, D. E.
- Latischev, G. D. See Budnizki, D. Z., Deisenroth-Missovski, M., Kartschatov, B. V., and Kartschatov, I. V.
- La Touche, C. J. See Bennet-Clark, T. A.
- La Tour, F. D., polymorphism in the series of normal fatty dicarboxylic acids, A., 1351.
- Latreille, M. See Roche, J.
- Latschinov, S., and Telegin, V., activity and stability of iron catalysts for ammonia synthesis, B., 268.
- Lattorf, R. See United Limmer & Verwöble Rock Asphalte Co.
- Latzko, W., cold asphalt (emulsion) for road construction, B., 438.
- Lau, E., and Johanneson, J., observation of the Brownian movement with the unaided eye, A., 162.
- Laub, R. See Elias, H.
- Laucks, I. F., and Laucks, Inc., I. F., adhesive, (P.), B., 865.
- Laucks, Inc., I. F., condensation products from urea and formaldehyde, (P.), B., 240.
- See also Laucks, I. F.
- Laudat, M. See Lévy-Solal, E.
- Laudermilk, J. D., soda-alumite from Molokai, Hawaiian islands, A., 323.
- Laue, M. von, molecular rays, A., 274.
- Optical reciprocal law applied to X-ray interference, A., 918. Effect of a magnetic field on thermal conductivity and viscosity of paramagnetic gases, A., 923. Fluorescence X-radiation of single crystals (with a note on electron diffraction), A., 1306.
- See also Justi, E.
- Lauer, C. E. See Texas Co.
- Lauer, K., constitution and reactivity. VIII. Substitution in aromatic compounds as a polar phenomenon or as a homopolar coupling effect. IX. Sulphonation of benzylidene chloride and benzotrichloride. XI. Oxidation of *o*- and *m*-dinitrobenzene. XII. Nitration and sulphonation of aromatic compounds, A., 853, 967, 970, 1113.
- and Atarashi, K., nitration of 1:9-benzanthrone by nitrogen dioxide and formulation of 1:9-benzanthrone, A., 1125.
- and Horio, M., condensation of quinaldine ethiodide and formaldehyde, A., 1379.
- and Oda, R., constitution and reactivity. X. Reaction kinetics of sulphonation by sulphuric acid containing water. XIII. Sulphonation of toluene and the directive action of the methyl group. XIV. Kinetics of sulphonation with oleum and the properties of fuming sulphuric acid of different concentrations, A., 863, 1113, 1465.
- Lauer, W. M., and Miller, S. E., structure of hydroxyazo-compounds, A., 613.
- Lauersen, F., isolation and determination of volatile substances from biological fluids and other mixtures, A., 1552.
- Lauer, S., and Siegel, S., sarcinae, infection organisms of beer, B., 203.
- Lauffmann, R. See Stather, F.
- Laug, E. P., Garavelli, L. A., and Nash, T. P., jun., availability of bread carbohydrates, A., 1408.
- and Nash, T. P., jun., nature of reducing substances in normal dog urine, A., 513.
- See also Amberson, W. R., and Webster, M. D.
- Laughlin, E. R., and Kress, O., factors influencing brightness of paper as recorded by the General Electric reflection meter, B., 490.
- Laughlin, W. C., Asch, A. B., and Filtration Equipment Corp., apparatus for clarification of sewage liquid, (P.), B., 576.
- Treatment of sewage, (P.), B., 752.
- Laughton, N. B., and Macallum, A. B., peripheral action of insulin in normal animals, A., 901.
- Launer, H. F., and Yost, D. M., kinetics of reaction between potassium permanganate and oxalic acid. II, A., 173.
- Launoy, L., effect of cysteine on toxicity of antimony, A., 1276.
- Laupe, W. See Briegleb, G.
- Lauprecht, E. See Schmidt, J.
- Laurence, J., and Labarre, Jules, iodometric determination of morphine, B., 79.
- Laurent, L., determination of arsenic in wines, B., 1016.
- Laurent, P., compound of phenol and aniline, A., 1488.
- Laurent-Gérard, P., and Simonnet, H., existence of specific defence enzymes in the organism, and their measurement by the interferometric method, A., 660.
- Laurie, A. H., physiology of whales, A., 889.
- Laurie, A. P., fused beads on platinum wire as solvents for small particles of insoluble material, A., 55. Old masters and modern forgeries, B., 32.
- Laurie, L. L. See Watson, H. B.
- Laurien, H. See Sonn, A.
- Lauris, A. See Kondratév, V.
- Lauritsen, C. C., and Crane, H. R., γ -rays from lithium bombarded with protons, A., 1296. Transmutation of lithium by deuterons and its bearing on the mass of the neutron, A., 1441. Disintegration of boron by deuterons and by protons, A., 1442. γ -Rays from carbon bombarded by deuterons, A., 1442.
- See also Crane, H. R.
- Lauritzen, C. W., displacement of soil solubles through plant roots by means of air pressure as a method of studying soil fertility problems, B., 167.
- Lauritzen, J. I., and Balch, R. T., storage of mill [sugar] cane, B., 202.
- Lauro, C., crystallographic investigation of $2[\text{HgClMnO}_4] \cdot 3\text{H}_2\text{O}$, A., 1061. Realgar from Komana (Albania), A., 1100.
- Lautenschläger, C. L., adenotropic hormones of the pituitary, A., 128.
- Lauterbur, E. J. See Lauterbur, F. X.
- Lauterbur, F. X., and Lauterbur, E. J., mixing machine, (P.), B., 1075.
- Lauth, H. See Bauer, W.
- Lautié, R., density and molecular structure of a pure normal liquid, A., 15. Latent heat of vaporisation and characteristic temperature, A., 290. Surface tension, density, and molecular constitution of a pure liquid, A., 432. Mol. wt. of a pure liquid at its normal b.p., A., 435. Exceptions to a rule giving the mol. wt. of a pure liquid, A., 814. Logarithmic increments of fluidity, A., 1065.
- Lautsch, W. See Paneth, F. A.
- Lauwers, [regeneration of] active charcoal, B., 660.
- Laval, J., diffraction of X-rays by the silver atom (factor of structure), A., 812.
- Laval, P. See Wahl, R.
- Laves, F., a manganese-silicon solution of $\Delta 2$ type, A., 23. Two-dimensional overstructures, A., 918.
- Laves, F., and Nieuwenkamp, W., interference phenomena in two-dimensional crystals, A., 918.
- Laviates, P. H., determination of changes in body fluids, A., 392.
- D'Esopo, L. M., and Harrison, H. E., water and base balance of the body, A., 1403.
- Lavin, G. L., and Northrop, J. H., ultra-violet absorption spectrum of pepsin, A., 805.
- Lavine, T. F., iodometric determination of cysteine, A., 737.
- Lavino & Co., E. J. See Seil, G. E.
- Lavollay, J., micro- and submicro-determination of iron, A., 906. Base exchange in soils, B., 646. Determination of exchange capacity of soils by means of copper. I, B., 965.
- See also Javillier, M.
- Lavrov, B. A., Janovska, B. I., and Jarussova, N., foodstuffs as vitamin-bearers. I. Contents of antiscorbutic factor in huckleberries stored during the winter and in preserve of black-currant juice, A., 417.
- Lavrov, F. See Gorchakov, G.
- Lavrova, M. See Ivanov, N. N.
- Lavrovski, K. P., hydrogenation of lubricating oils and kerosene, B., 1032.
- Law, G. H. See Carbide & Carbon Chem. Corp.
- Law, N. H. See Robinson, Robert A.
- Lawaczek Ges.m.b.H. See Lacher, L.
- Lawall, C. H., and Harrison, J. W. E., calomel from physical and chemical standpoints, A., 570.
- Lawler, F. C. See Moerk, F. N.
- Lawrance, J., white pigments, B., 1004.
- Lawrance, J. S. See Harris, I.
- Lawrence, A. S. C., anomalous flow of colloidal systems, A., 297. Soap micelles, A., 299.
- Lawrence, C. A. See Barnett, E. de B.
- Lawrence, C. K. See Atmospheric Nitrogen Corp.
- Lawrence, E. O., transmutations of sodium by deuterons, A., 277.
- and Livingston, M. S., three types of nuclear disintegration of calcium fluoride by bombarding protons of very great energy, A., 142. Emission of protons and neutrons from various targets bombarded by three-million-volt deuterons, A., 1296.
- Livingston, M. S., and Lewis, G. N., emission of protons from various targets bombarded by deuterons of high speed, A., 142.
- McMillan, E., and Henderson, M. C., transmutations of nitrogen by deuterons, A., 559.
- McMillan, E., and Thornton, R. L., transmutation functions for cases of deuteron-induced radioactivity, A., 1296.
- See also Henderson, M. C., Lewis, G. N., Livingston, M. S., and McMillan, E.
- Lawrence, F. I. L., thermal reactions of hydrocarbon gases, B., 979.
- and Atlantic Refining Co., treatment of hydrocarbons, (P.), B., 181.
- Lawrence, G. A., analysis of meat and bone meals, B., 1115.
- Lawrence, O. U., and Research Corp., electrical precipitation [of suspended particles from gases], (P.), B., 30.
- Lawrence, R. P. See Russell, A. S.

- Lawrence, W. S., and Kaumagraph Co., [fusible] marking composition, (P.), B., 110. Transfer, (P.), B., 110. Transfer [for decorating silk], (P.), B., 627. Transfer and marking composition therefor, (P.), B., 944.
- Lawrence Leather Co., A. C. See Bell, K. E.
- Lawrie, J. W. See Du Pont de Nemours & Co., E. I.
- Lawrie, L. G. See Imperial Chem. Industries.
- Lawrie, N. R., metabolism of protozoa. I. Nitrogenous metabolism and respiration of *Bodo caudatus*. II. Biochemical reactions in presence of washed cells of *Glaucoma pyiformis*, A., 535, 1419.
- and Robertson, M., effect of γ -irradiation on growth and nitrogenous metabolism of the protozoan *Bodo caudatus*, A., 782.
- Lawson, A., and Balson, E. W., reaction between hydrogen peroxide and cerous hydroxide, A., 594.
- Lawson, C. G. See King, Alexander.
- Lawson, G. B., inhibitory action of sulphur on growth of tubercle bacilli, A., 407.
- Redfield, K. T., and Boyce, O. D., toxic effects of sulphur on guinea-pigs and rabbits, A., 1022.
- Lawson, H. E., relationships of service characteristics of dry cells, B., 1052.
- Lawson, H. W., weight curve and Benedict test during pregnancy, A., 650.
- Lawson, W. E. See Du Pont de Nemours & Co., E. I.
- Lawton, J. J. See Conklin, E. B.
- Lax, M. See Voss, W.
- Lazar, A., and Associated Oil Co., treatment of hydrocarbon oils, (P.), B., 793. Manufacture of medicinal oils from mineral oils, (P.), B., 1023.
- Evans, J. M., and Associated Oil Co., treatment of hydrocarbon oils, (P.), B., 90.
- Lazarev, A. M., nature of hygroscopicity of liquid dielectrics, A., 580. Influence of the form of distribution of water on electrical stability of liquid dielectrics, A., 580.
- Lazarev, K., changes in salt content of irrigation water as it passes through the irrigation system, B., 243.
- Lazarev, N. V., and Brusilovskaja, A. I., dependence of action of volatile narcotics on duration of exposure and concentration, A., 655.
- Lazarev, P. P., and Formozova, L. N., influence of light on certain plant processes, A., 1178.
- Lazier, W. A. See Du Pont de Nemours & Co., E. I.
- Lazniewski, M., determination of ebullioscopic constants of ethyl and isobutyl alcohols, benzene, and chloroform, A., 294.
- L'Azote Français. See Lefort des Ylouses, G.
- Lazzell, C. L. See Ashburn, H. V.
- Lea, C. H., cold storage of poultry. II. Chemical changes in fat of gas-stored chickens, B., 77. Rapid method for comparison of susceptibilities of oils and fats to oxidation, B., 158. Taint production in fat of chilled beef, B., 172.
- Lea, D. E., theory of ionisation measurements in gases at high pressures, A., 275. Secondary γ -rays excited by the passage of neutrons through matter, A., 1186.
- Lea, D. E. See also Chadwick, J.
- Lea, F. C., and Arnold, R. N., embrittlement of low-carbon steel, B., 549.
- Lea, F. M., rate of hydration of Portland cement and its relation to rate of development of strength, B., 357. Application of phase-equilibrium studies on the system $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{Fe}_2\text{O}_3$ to cement technology, B., 357. Relation between composition and properties of Portland cement, B., 592.
- and Parker, T. W., quaternary system $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{Fe}_2\text{O}_3$: quaternary system $\text{CaO}-2\text{CaO}, \text{SiO}_2-5\text{CaO}, 3\text{Al}_2\text{O}_3-4\text{CaO}, \text{Al}_2\text{O}_3, \text{Fe}_2\text{O}_3$, A., 448. Quaternary system $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{Fe}_2\text{O}_3$ in relation to cement technology, B., 675.
- Lea, H. I., still and evaporation apparatus, (P.), B., 579. Distillation process and apparatus, (P.), B., 1076.
- Leach, F. P. See Imperial Chem. Industries.
- Leach, L. L., and Fuller Lehigh, ball pusher for [ball-and-race] grinding mills, (P.), B., 706.
- Leach, R. H., and Handy & Harman, [non-tarnishing silver] alloys, (P.), B., 461.
- Leach, R. W. E., composition [derived from waste sulphite liquor] and process therefor, (P.), B., 944.
- Leach Co., C. H. See Weber, N.
- Leadbeater, C. J. See Beynon, C. E.
- Leahy, F. E., and Youngstown Sheet & Tube Co., operation of open-hearth furnaces, (P.), B., 28.
- Leahy, M. J., iron carbonyl as an anti-knock compound, B., 1031.
- Leandri, A. See Roche, J.
- Learmonth, W. See Imperial Chem. Industries.
- Learner, A. See Kunde, M. M.
- Lease, E. J. See Totttingham, W. E.
- Lease, J. G., and Parsons, H. T., relation of dermatitis in chicks to lack of vitamin-B, and to dietary egg-white, A., 416.
- Leatherman, M., fireproofing of cellulosic materials, (P.), B., 304.
- Léauté, A., laboratory measurement of index of roughness of road surfaces, B., 189. Measurement of surface tension of viscous substances such as tars and bitumens, B., 885.
- Leavenworth, C. S. See Pucher, G. W.
- Leaver, E. S., auriferous black sands of the Pacific Coast, B., 953. Amalgamation and cyanidation [of gold ores], B., 953.
- and Royer, M. B., amalgamation during fine grinding of gold ores, B., 953.
- and Woolf, J. A., flotation of gold: effect of sodium sulphide, B., 953.
- Lebanon Steel Foundry. See Jones, A. C.
- Le Baron, R. F., and Standard Alcohol Co., sulphation of olefines, (P.), B., 395, 442.
- Lebeau, P., and Morette, A., structure of peranthracites and true anthracites, B., 611.
- See also Baxter, G. P.
- Lebedev, A. A., and Chvostikov, I. A., intensity variation of the auroral green line in the night sky, A., 556.
- Lebedev, A. N., enzymic decomposition of sugar to carbon dioxide, alcohol, and lactic acid, with intermediate formation of triose (or triosephosphoric acid), A., 534.
- and Dikanova, A., enzymic synthesis of sucrose, A., 659.
- Lebedev, P. S., "vacuum-aluminium" method of determining oxygen in steel, B., 410.
- Lebedev, S., and Sergienko, S., dimerisation of Δ^2 -butadiene, A., 1480.
- Lebedev, S. V., synthetic rubber and creation of a synthetic rubber industry in the U.S.S.R., B., 861.
- Lebedeva, M. N., penetration of therapeutic substances from the organism of the mother into the embryo, A., 1021.
- Lebedeva, T. A. See Kotnitzki, A. I.
- Lebedinski, V. V., compounds of rhodium with ammonia, A., 461. Compounds of rhodium with thiocarbamide, A., 461. Compounds of rhodium with acetonitrile, A., 461. Compounds of iridium with thiocarbamide, A., 461.
- Le Bihan, H. See Cornnbert, R.
- Le Blanc, M., and Webner, G., gold-copper alloys, A., 1198.
- Leblanc, (Mlle.) Marthe, rapid determination of polonium in a natural radiolead by direct measurement of α -rays and Ra, A., 1095.
- Leblond, C. P. See Giroud, A., and Randoin, L.
- Lebo, R. B., and Standard Alcohol Co., purification of sec.-alcohols, (P.), B., 13.
- Lebour, M. V. See Harvey, H. W.
- Lebre, A. F., plate heat-exchange apparatus for fluids, (P.), B., 481. Production of heat and cold, (P.), B., 609, 657.
- Le Breton, E., rate of diffusion of ethyl alcohol in the organism, A., 244. Concentrations of ethyl alcohol in the blood and its rate of oxidation in the organism, A., 244. Influence of diet on rate of oxidation of ethyl alcohol, A., 245. Micro-technique for study of alcohol oxidation by tissue *in vitro*, A., 387. Non-utilisation of alcohol during muscular work by the rat, A., 387. Effect of concentration of alcohol attained at the surface of the tissues on its rate of oxidation *in vivo*, A., 1016. Comparative determination of the rate of oxidation of alcohol in the organism by blood-alcohol curves and direct measurement, A., 1016. Utilisation of variations of respiratory quotient to determine the part played by ethyl alcohol in basal exchange; case of carbohydrate diet, A., 1151.
- Nicloux, M., and Schaeffer, G., coefficient of ethyl alcohol oxidation and basal metabolism in some homeothermic species, A., 1531.
- and Schaeffer, G., effect of thyroxine on the basal metabolic rate; adult rabbit, A., 651. Effect of thyroxine on the basal metabolic rate; growing rabbit, A., 651.
- See also Nicloux, M.
- Le Brocq, L. F. See Sutton, H.
- Lebtog, O. See Rheinwald, H.
- Lebus, W. E. O. See Horter, C. W.
- Lecat, M., azeotropism in relation to polymerisation and solvation, and negative azeotropism from the functional viewpoint, A., 157. Frequency of azeotropism without the Bancroft point, and limited azeotropism, A., 157. Ethyl alcohol-halogen compound azeotropic couples under normal pressure, A., 695.
- Lechner, R., oxidation-reduction potential in fermentation industries, B., 823.
- See also Fink, H.

- Le Chuiton, F., Pirot, R., Berge, C., and Pennaneac'h, J., composition of a mineral medium particularly favourable for the growth of typhoid bacilli; filtrates of typhoid bacilli cultivated on this medium; their mode of action; their utilisation in therapy, A., 786.
- Lechzyck, E. See Lieser, T.
- Leckie, A. H., and Angus, W. R., temperature control system for use in study of Raman effect of liquids, A., 188.
- See also Angus, W. R.
- LeClerc, J. A. See Bailey, L. H., Coe, M. R., and Davidson, J.
- Lecoeuvre, E. See Delbart, G. R.
- Lecoin, M., β -radiation of actinium-C", mesothorium 2, and of uranium X₁ and its derivatives, A., 1048.
- Lecomte, J., and Perrichet, J., ultra-violet rotatory dispersion of camphor in sulphuric acid solution, A., 148.
- See also Andant, A., and Cheng, H. C.
- Lecoq, R., food value of mannitol and sorbitol in relation to the balance of the ration, A., 112. Alimentary unbalance caused by Senegal gum, A., 261. Protein substances of discubilibrium and leucocytosis, A., 640. Lactic bacilli and alimentary unbalance, A., 903. Is it possible, in a balanced ration, to substitute for glycerides the corresponding fatty acids? A., 1015. Biological study of influence of manufacturing process on food value of preserved products, B., 1021.
- and Barban, M. L., change in antirachitic activity of orthophosphoric acid by esterification with phenol, A., 109. Comparison of antirachitic action of methyl phosphates, glycerophosphates, and lecithin, A., 238. Effect of open and closed carbohydrate chains on antirachitic activity of orthophosphoric acid, A., 657.
- and Gallier, R., phosphorus and rickets. IV. Elementary phosphorus and experimental rickets, A., 650.
- and Villette, H., lactic bacilli as a possible source of vitamin-B, A., 903.
- Lécorché, and Lambert, measurement of viscosity, B., 785.
- Lecus, H., action of iodine on Tussah silk, B., 95.
- L'Ecuier, P. See King, F. E.
- Leder-Packendorff, L. See Packendorff, K., and Zelinski, N. D.
- Lederer, E., carotenoids of the integuments of some insects, A., 105. Constitution of pectenoxanthin, A., 233. Carotenoids of three *Ascidia* (*Halocynthia papillosa*, *Dendrodoa grossularia*, *Botryllus Schlosseri*), A., 233. Carotenoids of some fungi, A., 254. Red pigment in the skin of goldfish, A., 646. Chromatographic adsorption and its applications, A., 876. Echinenone and pentaxanthin: two new carotenoids found in the sea-urchin (*Echinus esculentus*), A., 1145.
- See also Chargaff, E.
- Lederer, E. A. See Westinghouse Lamp Co.
- Lederer, E. L., measure for separation of emulsions (demulsification), A., 701. Capillaroscopy; new capillaroscope, A., 1342. Velocity and heat of reaction in cracking [of petroleum oils], B., 581. "Tensimetry" of hydrocarbons, B., 613. Absolute colour determination of mineral oil by absorption measurements, B., 614.
- Lederer, E. L., Engler-Ubbelohde distillation curves [of hydrocarbon oils], B., 709. Criticism of the Gurwitsch table for viscosity of mixtures, B., 881. Simple apparatus for measurement of thermal conductivity of oils, B., 1003.
- Lederle, P., sources of error in determining phosphoric acid by the citrate method, B., 304.
- See also Mach, F.
- Ledieu, J. See Langeron, L.
- Ledig, P. G. See Compton, A. H.
- Ledingham, J. C. G., and Gye, W. E., nature of filterable tumour-exciting agent in avian sarcomata, A., 514.
- Ledrut, J. See La Barre, J., and Wodon, J. L.
- Leduc, E., hydraulic properties of blast-furnace slag, B., 903.
- Lee, A. D., extraction of metals from ores, B., 273.
- Lee, C. See Kosuzi, T.
- Lee, C. H. See Evans, W. V.
- Lee, D. H. K. See Evans, Charles Lovatt.
- Lee, D. K., and Stühr, E. T., potency of Oregon digitalis, A., 1158.
- Lee, E. See Kosuzi, T.
- Lee, E. L. See Mahin, E. G.
- Lee, F. H. See Evans, W. V.
- Lee, G. M., concentrating gold in copper converting, B., 996.
- See also Cavers, T. W.
- Lee, H. C. See McCaughey, W. J.
- Lee, H. H., and Warner, J. C., system diphenyl-dibenzyl-naphthalene; nearly ideal binary and ternary systems, A., 448.
- Lee, H. R., and Newport Industries, Inc., refining of wood rosin, (P.), B., 736.
- See also Du Pont de Nemours & Co., E. I.
- Lee, I. E. See Calcott, W. S.
- Lee, J. van der. See Verkaide, P. E.
- Lee, J. A., refining of common salt, B., 492.
- Lee, M. See Schaffer, N. K.
- Lee, P. J. van der, vapour pressure of hexachloroethane, A., 1064.
- Lee, R. K., and Chrysler Corp., coating of [iron] articles [with rubber], (P.), B., 1052.
- Lee, S., and Sakurada, I., dielectric investigations of cellulose derivatives in organic liquids. III.—VII., A., 445. 1305. Viscosimetric investigation of benzene solutions of ethyl- and benzyl-cellulose, A., 1459.
- See also Sakurada, I., and Taniguti, M.
- Lee, W., physical and chemical characteristics of turtle oil, B., 1102.
- Lee, W. C., and Lewis, H. B., effect of fasting, refeeding, and variations in cystine content of diet on composition of the tissue-proteins of the white rat, A., 242.
- See also Wright, N.
- Lee, W. Y. See Carruthers, A.
- Lee, Y. M. See Chi, Y. F.
- Leech, H. L., Fitzgibbon, M., and Lunevale Products, Ltd., [horticultural] wetting-out agents, (P.), B., 743.
- Leeds & Northrup Co. See Harsch, J. W.
- Leek, T. G. See Statham, N.
- Leendertse, J. J., Höppler viscosimeter versus Vogel-Ossag viscosimeter, A., 1342.
- See also Waterman, H. I.
- Leent, F. H. van, equivalents, A., 840.
- Leeper, G. W., relationships of soils to manganese deficiency of plants, A., 266.
- Lees, A., electric moment of an electron, A., 425.
- Lees, C. S., structure of polished metal surfaces, A., 1308.
- Leeson, W. S. See Miller, E. H.
- Le Fanu, B. See Snow, R.
- Lefebvre, (Mlle.) L., absorption spectrum of ozone at a low temperature, A., 561. Absorption spectrum of ozone in the photographic infra-red, A., 1051.
- Lefèvre, C., and Desgrez, C., aromatic sulphides, A., 615.
- Le Fèvre, (Mrs.) C. G., and Le Fèvre, R. J. W., dipole moments of 1:4-dinitro-, 1:3:5-trinitro-, and certain 2:4:6-trisubstituted 1:3:5-trinitro-benzenes, A., 1056. Dipole moments and structures of some quinoline derivatives, and orientation of Claus and Hofmann's *x*-nitroisoquinoline, A., 1506.
- Le Fèvre, R. J. W., and Robertson, K. W., dipole moments of *p*-cymene, 2- and 3-halogeno-*p*-cymenes, carvacrol, thymol, *p*-ethyltoluene, *p*-tert-butyltoluene, 1:3-dimethyl-5-tert-butylbenzene, tert-butylbenzene and its *p*-nitro-derivative, A., 684.
- Lefèvre, J., distillation of carbonaceous materials, (P.), B., 982.
- Le Fèvre, R. J. W., relation between molecular polarisation in solution and dielectric constant of the solvent, A., 927. Molecular polarisation of solutes and dielectric constant of solvents, A., 1036.
- See also Ganguly, S. N., and Le Fèvre, (Mrs.) C. G.
- Lefèvre-Lebeau, Y., changes in physical properties of chocolate due to incorporation of phosphatides, B., 698.
- Lefol, J., hydrates of calcium aluminates, sulphatoaluminates, and chloroaluminates, A., 179. Hydrates of mono-calcium silicate, A., 1469.
- Lefort des Ylouses, G., and L'Azote Franç., production of nitrate of lime through absorption, at elevated temperatures, of nitrous fumes, (P.), B., 849.
- Lefrou, G., and Bonnet, P., regulation of protein disequilibrium of blood-serum under the influence of injections of serin: experiments on man, A., 1517. Regulation of protein disequilibrium of blood-serum under the influence of injections of serin: animal experiments, A., 1519.
- Le Fur, P. See Guillemet, R.
- Le Galley, D. P., Geiger-Müller counter suitable for measurement of diffracted Mo K X-rays, A., 1341.
- Legard, A. R. See Hinshelwood, C. N.
- Legatu, H., and Maume, L., changes in tobacco leaves due to "wild-fire" disease, A., 1181.
- Legault, R. R. See Kharasch, M. S.
- Léglé, E. G. M. R., transformation of hydrocarbons, (P.), B., 892.
- Legendre, standardisation of methods of testing corrosion of metals in sea-water, B., 231.
- Léger, E., determination of morphine in opium by the lime method. I. and II., B., 45, 573.
- Legraye, M., origin of brilliant coal (vitrain), A., 61.
- Lehigh Portland Cement Co. See Pearson, J. C.
- Lehman, W., and Scott, F. H., total protein content of plasma and serum, A., 1393.

- Lehman, W. W., treatment of wheat, (P.), B., 972.
- Lehmann, E., and Grabow, W., synthesis of polyketocarboxylic acids of the fatty acid series. I., A., 733.
- and Krätschell, B., reactions of *trans*- β -decalone. I. and II., A., 84, 492.
- and Paasche, W., Δ^3 -tetrahydro-*p*-toluic acid, A., 974. New diene syntheses, A., 978. 2-Amino-3:4-dimethoxytoluene, A., 1233.
- and Tausch, E., chemistry of metol-quinol development, B., 750.
- Lehmann, F. B. See under Lehmann, J. M.
- Lehmann, G. See Schöpf, C.
- Lehmann, H. (Freiburg). See Fischer, F. G.
- Lehmann, H. (Heidelberg), mechanism of fermentation of dihydroxyacetone, A., 785.
- Lehmann, H. L. See Rabinowitch, E.
- Lehmann, J., biological oxidation-reduction potential; potential determinations in the system alcohol-dehydrogenase-acetaldehyde, A., 248. Occurrence of methylglyoxal in urine during vitamin-B₁ deficiency, A., 1267.
- Lehmann, J. M., grinding mills, (P.), B., 929.
- Lehmann, W., bactericidal action of human blood, A., 409.
- Lehmstedt, K., acridine. XII. *ms*-Acridine derivatives. III. Acridine-*N*-oxides and the "acridols," A., 1251.
- Lehn & Fink, Inc., germicidal preparations, (P.), B., 254*.
- and Klarman, E., germicidal preparations, (P.), B., 752.
- Klarman, E., and Gates, L. W., anti-bacterial and germicidal compounds, (P.), B., 46. Halogenophenols [bactericides], (P.), B., 925*.
- See also Klarman, E.
- Lehnartz, E., action of fluoride on intermediary processes in glycolysis in yeast, A., 251.
- Lehnher, E. R., acute carbon tetrachloride poisoning, A., 1276.
- Lehr, E. See Chabanier, H.
- Lehrman, L., and Kramer, Jacob, benzoate method for separation of iron, aluminium, and chromium; suggested changes for its application to qualitative analysis, A., 187.
- Lei, F. S., calculation of entropies from X-ray data, A., 1198.
- Lei, H. H., Sah, P. P. T., and Shih, C., semicarbazides. III. *o*-Tolylsemicarbazide as reagent for identification of aldehydes and ketones, A., 1259.
- See also Sah, P. P. T.
- Leicester, H. M., reaction between mercury diaryls and diarylselenium dihalides, A., 1515.
- See also Holmes, H. N.
- Leigh, A. G., apparatus for filtering and purifying liquids, (P.), B., 290.
- Leigh, O. C., jun. See Field, M. E.
- Leigh, R., penetrative insecticide to obviate removal of wall plaster when carrying out disinfection of buildings, (P.), B., 770.
- Leigh-Smith, A., and Richardson, H. O. W., interchange of heavy atoms in organometallic methyls, A., 851.
- See also Richardson, H. O. W.
- Leighton, A., and Leviton, A., reducing viscosity of a colloidal suspension of proteins, (P.), B., 123.
- Leighton, A. See also Leviton, A.
- Leighton, P. A., and Lucy, F. A., photoisomerisation of *o*-nitrobenzaldehydes. I. Photochemical results. II. Mathematical treatment, A., 48.
- Smith, Sinclair, and Henson, F. C., combined recording microphotometer, densitometer, and comparator, A., 188.
- See also Giese, A. C., Leighton, W. G., and Mortensen, R. A.
- Leighton, W. G., and Leighton, P. A., visual demonstration of evaporation of mercury, A., 724.
- Leiner, G., oxygen pressure and fermentation, A., 509. Action of pituitary extracts on ketone content of blood, A., 541.
- Leineweber, M. See Heger, A.
- Leinzinger, M. See Issekutz, B. von.
- Leipelt, K. See Zinnwerke Wilhelmsburg G.m.b.H.
- Leipert, T., bromine in the normal organism, A., 1518.
- and Watzlawek, O., bromine content of the organism in mental patients, A., 1518.
- Leipold, C., mechanical agitation and alum-floc formation [in water], B., 256.
- Leipunski, O. I., steric factor in the equation of activated adsorption, A., 578.
- Leisen, E., dispersion of sodium-potassium felpars, A., 19.
- Leiser, H., anodes for electrolytic baths [for electrodeposition of metals], (P.), B., 461.
- Leiss, C., light intensity for spectral apparatus, spectrographs, and monochromators, A., 57. Precision absorption measurements with prism mirror spectrometers and thermo-elements, A., 561. Vacuum monochromator and spectrograph with quartz and fluorite optical systems for regions 0.700—0.160 μ (quartz) and 0.700—0.130 μ (fluorite), A., 1217.
- Leitenberger, W., thermal ratios and measurement of tube apparatus for exothermic heterogeneous gas catalysis, A., 839.
- Leites, S., automatic regulation of fat metabolism in man, A., 390.
- Lifschitz, L. S., and Odinov, A., carbohydrate metabolism in infectious fevers, A., 108.
- Sorkin, E., and Agaletzka, A., pathophysiology of fat metabolism in diabetes, A., 382.
- Leitgeb, W., and Miksch, E., miscibility of sulphides of copper, lead, and iron with lead in the liquid state, A., 292.
- Leithe, W., combined refractometric determination of fat and sugar in cocoa and chocolate, B., 172. Rapid refractometric macro- and micro-determination of fat in oil seeds, B., 317. Refractometric determination of fat in cheese, B., 874.
- and Müller, Erika, refractometric determination of fat in German soya, B., 774.
- Leitman, S. I., and Uchodin, S. A., combination scattering and association of molecules, A., 146, 166.
- Leitmeier, H. See Feigl, F., and Köhler, A.
- Leitz, C. F., Sivertz, V., and Kobe, K. A., measurement of p_H of sulphite waste liquor with the glass electrode, B., 798.
- Lejay, P., atmospheric ozone in the neighbourhood of Shanghai, A., 59.
- Lejeune. See Gantois.
- Lejeune, A. See Schockaert, J. A.
- Lejeune, F., and Jasmatz, A., toning process, particularly for toning red colour-component image for multicolour photography, (P.), B., 382.
- Lejeune, G., tartaromanganic salts, A., 475. Mode of action of etching inhibitors, B., 311.
- Leland, H. L. See Mason, C. M.
- Le Laurin, H., and Fry, J. L., anode for [interior] electroplating, (P.), B., 414.
- Lele, S. L., destruction of earth worms, B., 690.
- Lelean, P. S., chlorination of water supplies, B., 256.
- Leigemann, W., cracking of hydrocarbons, (P.), B., 795*.
- and Hydrocarbon Processes, Inc., treatment [cracking] of hydrocarbon products, (P.), B., 793.
- Lelu, E. See Chabanier, H.
- Lelu, P., metabolism of glyoxaline, A., 389.
- Lemaire, and Ribère, chemical composition of hydatid liquid, A., 775.
- LeMaistre, J. W. See Hauser, C. R.
- Lemaitre, G., Vallarta, M. S., and Bouckaert, L., north-south asymmetry of cosmic radiation, A., 560.
- Lemale, P. G., apparatus for concentrating liquids under vacuum, (P.), B., 84.
- Leman, A. See Palfray, L.
- Lemarchands, M., chemistry of polonium, A., 1440.
- and Debiesse, J., electrolysis of salts of weak bases, A., 1330.
- and Jacob, M., chemical inertia, A., 587.
- and Le Viet Khoa, hydrotimetric method, A., 312.
- and Saunier, (Mlle.) D., action of metalloids on basic oxides, A., 592. Compounds of basic oxides and metalloids [non-metals], A., 1332.
- Lemberg, R., transformation of haem into bile-pigments, A., 884.
- See also Dixon, M., and Waddington, C. H.
- Lembke, A. See Damm, H.
- Le Mesurier, C. R. See Simpson, E. S.
- Lemke, A. See Biltz, W.
- Lemke, A. L. See Klebanski, A. L.
- Lemke, H., influence of carbon dioxide on quality of stored seed potatoes, B., 378.
- Lemmel, L., phenolic derivatives of lignin, A., 84.
- See also Piña de Rubies, S.
- Lemmens, J. F. See Prins, E. C.
- Lemmer, F. See Fonrobert, E.
- Lemmerman, P. C. See Grasselli Chem. Co.
- Lemmermann, O., green manuring, B., 373.
- and Behrens, W. U., influence of manuring on permeability of soils, B., 373. Importance of appropriate nutrient ratios for plants, B., 515.
- Engel, H., and Behrens, W. U., influence of artificial fertilisers and stall manure on soil productivity, B., 515.
- and Fresenius, L. [with Margotte, E.], influence of some potash fertilisers and their associated salts on lime status of soils, B., 1109.
- Lemmerz, J., potassium manuring and quality of wheat, B., 73.
- Lemmon, R. J. See Imperial Chem. Industries.

- Lemoigne, M., and Desveaux, R., balance of nitrogen determinable by the Kjeldahl method in aerobic cultures of micro-organisms. III. Rôle of ammonia, A., 899. Formation of hydroxylamine in cultures of *Aspergillus niger* in a medium containing ammonium nitrate, A., 1166.
- and Mongiullon, P., butter improvers based on diacetyl; are they natural products? B., 781.
- Lemoine, R., [preparation of steel in] the basic electric furnace, B., 1144.
- Lemon, J. T. See Lowry, T. M.
- Lemon, W. S., and Higgins, G. M., pulmonary lesions experimentally produced by introduction of aluminium oxide and of borosilicate glass, A., 896.
- Lempert, J. See Rndberg, E.
- Lempicki, E. See Becker, H.
- Lenchold, V. A., separation of α -naphthylamine-4-, -5-, and -2-sulphonic acids, B., 297.
- Lendle, A., adsorption of oxygen on charcoal; calorimetry and kinetics of slow adsorption, A., 441.
- Lendle, L., depth of avertin narcosis in animal experiments after preparatory therapeutic measures, A., 655.
- and Pusch, F., combination of *Digitalis* glucosides with blood-proteins, A., 527.
- and Schmelzer, W., Baljet's colour reaction for *Digitalis* substances, A., 527. See also Böhm, R.
- Lenher, S., and Smith, J. E., dyeing of cotton: particle size and substantivity. I. and II., B., 541. Dyeing of cotton; substantive dyes and salt-sensitivity, B., 588.
- See also Du Pont de Nemours & Co., E. I.
- Lennard-Jones, J. E., and Strachan, C., interaction of atoms and molecules with solid surfaces. I. Activation of adsorbed atoms to higher vibrational states, A., 1070.
- Lennig & Co., Inc., C. See Bauer, W.
- Lennings, W., use of an oxygen-enriched blast in blast-furnace practice, B., 633.
- Lennox, J., diet and its relation to dental disease, A., 382.
- Lennox, W. G. See Gibbs, F. A.
- Lenoir, M., two varieties of chromatin in the nuclei of *Lilium martagon*, A., 796.
- Lenssen, M. See Michels, A.
- Lenz, E., electric deflexion of cosmic ultra-radiation, A., 8.
- Lenz, W., intensities of molecular rays diffracted by rigid crystal surfaces, A., 140. Graphited lubricants and bearing metals, B., 889.
- Lenzlinger, M. See Rupe, H.
- Leo, N. B., heat-exchange apparatus, (P.), B., 177.
- Leo, S. T., and Chen, Y. H., chemical control of one-bath chrome tannage, B., 916.
- Leövey, F. von, localisation of kidney-deaminase, A., 659.
- Léon, A. See Erdtman, H.
- Leonard, A. G. G., and Ginnell, J., weathering of stonework of the [Irish] National Museum and of Government Buildings, B., 24.
- Leonard, C. D. See Jenny, H.
- Leonard, L. G. A., heat economy in industrial applications of town gas, B., 389.
- Leonard, S. L. See Main, R. J.
- Leone, A., modifications in content of inorganic phosphorus in blood and urine in experimental scurvy, A., 1270.
- Leonhard Wax Co., T. See Hough, A.
- Leonhardt, W., colloid-chemical observations on inks, B., 1004.
- Leonhardt, H., and Buscke, W., [pterocarpin], A., 88.
- and Fay, K., constituents of red sandalwood; pterocarpin, A., 218.
- Leonian, L. H., effect of auxins on *Phytophthora cactorum*, A., 1548.
- Leonov, B. I. See Ardashev, B. I., and Sakostschikov, A. P.
- Leonteva, A. A. See Volarovitch, M. P.
- Leontiev, H., identity of globulins from seeds of some *Cucurbitaceae*, A., 134.
- and Alexandrovski, V., action of protein-organic base compounds on warm- and cold-blooded animals, A., 397.
- Leontovitch, A. V., ammonium picrate for preliminary fixation in intra-vital staining, A., 906.
- Leontovitch, M., theory of molecular dispersion of light in unsymmetrical heated crystals, A., 565.
- Leontovitch, V. A. See Prianischnikov, N. D.
- Leopold, H. See Haehn, H.
- Leopold, J. S. See Bernhard, A., and Dreker, I. J.
- Leopold, W. See Hahn, G.
- Leopoldi, G. See Fischer, Hellmut.
- Leopoldseder, F. See Scheuring, L.
- Le Paire, See Fauveau.
- Lepape, A., origin of helium in natural gas; relation between helium and lithium contents in certain sodium chloride mineral springs, A., 322. Origin of helium in natural gases; helium and ekacadium (element no. 87), A., 322.
- and Colange, G., sampling apparatus and composition of air in the stratosphere, A., 840. Composition of air from the stratosphere, A., 953. Water vapour and carbon dioxide in the air of the stratosphere, A., 953.
- and Trannoy, R., fixation by plants of radium in soils, B., 73.
- Le Pelle, R. R., bright normalising and deoxidising (gas pickling) of [metal] sheet and strip, B., 1046.
- Le Pelley, R. H., pyrethrum extract spraying for control of *Anlesia* on coffee, B., 516.
- Leperson, M. G. See Roiter, V. A.
- Lepeschkin, V. V., chemical reactions during formation of starch paste, A., 581. Effect of temperature on haemolysis by hypotonic solutions, A., 1394.
- Lepigre, M. A. L., disinfection in partial vacuum, B., 127.
- Lepin, L., and Strachova, G., effect of temperature on adsorption of electrolytes by charcoal, A., 818.
- Lépingle, M., examination of some special refractory materials, B., 630.
- Lepkovsky, S., and Jukes, T. H., vitamin-B₂ requirements of the chick, A., 1429.
- and Jukes, T. H., growth-promoting effect of flavin on the chick, A., 1545.
- Ouer, R. A., and Evans, H. M., nutritive value of fatty acids of lard and some of their esters, A., 523.
- Popper, W., jun., and Evans, H. M., concentration of vitamin-B₂ by adsorption and elution from fuller's earth, A., 415.
- See also Evans, H. M.
- Lepp, H. See Comp. Gén. d'Electrometall.
- Lepper, W., ash-free plates for filtration in qualitative and quantitative work, especially for determination of "sand" in feeding-stuffs, B., 875. Determination of phosphoric acid in nitrophoska containing lime, B., 1091.
- Leppert, Z., and Majewska, Z., detection of wood oil, B., 159.
- Leppla, P. W. See Clark, G. L., and Johnstone, H. F.
- Leprince-Ringuet, L., sudden changes in speed and direction shown by the paths of high-energy electrons, A., 801.
- See also Auger, P.
- Lerberghe, G. van, rapid calculation of fugacities of pure substances, A., 290.
- Lerer, M., determination of mol. wt. of mineral oils and polymerised hydrocarbons, B., 536.
- Lerman, J. See Means, J. H., and Salter, W. T.
- Lerner, H. See Shapiro, A.
- Lerner, M. M. See Straub, J.
- Leroide, J., and Bruillet, A., titrimetric determination of manganese, A., 838.
- Leroux, L., rapid determination of traces of active chlorine in water, B., 208.
- Leroux, P., action of the Nernst lamp, A., 560.
- Leroy, A., use of ordinary and germinated oats in pig feeding, B., 476.
- Le Roy, G. A., cause of spontaneous heating of raw cotton, B., 445.
- Leroy, M., and Migeot, H., manufacture of tin oxide from instantaneous combustion of a mixture of air and pulverised hot liquid metal, (P.), B., 1092.
- Le Roy, R. H., and Hendricks, B. C., thermochemical study of *d*-gluconic acid and its modifications, A., 37.
- Lesbre, M., action of alkyl iodides on alkali plumbites, A., 611. Organic compounds of tin, A., 966.
- Leschewski, K., chemistry of blue ultramarine, B., 913.
- Möller, H., and Podschus, E., substitution and decomposition of alkalis in blue ultramarine, A., 50.
- and Podschus, E., thermal degradation of sulphur in blue ultramarine, A., 1333.
- See also Möller, H.
- Leschtschinski, M. See Obrutski, G.
- Lescœur, See Armand.
- Lesberg, K., rubber articles, (P.), B., 1104.
- Leshner, C. E., low-temperature carbonisation apparatus, (P.), B., 485.
- See also Pittsburgh Coal Carbonization Co.
- Leslie, R. T., critical solution temperatures of some hydrocarbons in sulphur dioxide, A., 159. Separation of a dimethylcyclohexane fraction from a Mid-Continent petroleum, B., 887.
- Lesné, E., and Clément, R., relative nutritional values of proteins, A., 388. Relative nutritional values of carbohydrates, A., 390.
- Dreyfus-Sée, G., and Lardé, passage into milk of some diffusible substances (urea, sodium chloride, methylene-blue), A., 884.
- Zizine, P., and Briskas, S. B., metabolism of blood-phosphorus during some infectious diseases of childhood (diphtheria, tuberculous meningitis, and measles), A., 519.
- Lesnick, G. J. See Bent, H. E.
- Lesochin, I. G. See Pavlov, K. F.
- Lespian, R., synthesis of *allodulcitol* and *dulcitol*, A., 63.

- Lespieau, R., and Heitzmann, P., hydrocarbons C_8H_{11} formed by interaction of crotonyl bromide and its magnesium derivative, A., 728.
- and Lombard, R., preparation of acetylenic and di-ethylenic alcohols in the C_6 and C_8 series, A., 470.
- Lessertisseux, P. E. F., three-colour photography, (P.), B., 126.
- Lessheim, H., and Samuel, R., pair linking theory of valency, A., 431, 810. Dissociation of some molecules with free valencies, A., 1057. Dissociation energy of carbon monoxide and heat of sublimation of carbon, A., 1462.
- Lessing, R., classification of coals, A., 843; B., 483. Fluorine in coal, B., 5. Purification of combustion gases and apparatus therefor, (P.), B., 10. Purification of combustion gases, (P.), B., 214.
- Lesslie, (Miss) M. S., and Turner, E. E., configuration of heterocyclic compounds. II. Phenoxarsonium salts. III. Optical resolution of 10-ethylphenoxarsine-2-carboxylic acid, A., 1257, 1390.
- Lestringues, L. L., grinding, crushing, pulverising, and similar mills, (P.), B., 435.
- Lesure, A. See Loeper, M.
- Letch, R. A., and Linstead, R. P., olefinic acids. XIII. Δ^7 -*n*-Hexenoic acid and "hydrosorbic" acid, A., 195.
- Le Thomas, A., properties of cast iron produced in electric furnaces, B., 309. Anomalies in hardening of castings and their relation to uniformity of the product, B., 593.
- Letonoff, T. V., micro-determination of hæmoglobin; modification of benzidine reaction, A., 1141.
- Letort, M., kinetics and activation energy of thermal decomposition of acetaldehyde vapour, A., 307. Kinetics of thermal decomposition of acetaldehyde vapour in presence of traces of oxygen, A., 307.
- See also Goldfinger, P.
- Le Tourneur-Hugon, and Valin, J., simplified molecular constant of Belgian milks, B., 781.
- Lettré, H., stereochemistry of sterols and bile acids, A., 857.
- See also Windaus, A.
- Letzig, E., detection of thickening materials in milk products, B., 42.
- Leuch, W. P., Harding, Ltd., S. C. & P., photographic diazo-type prints, (P.), B., 702, 831.
- Leuchs, H., and Beyer, H., *Strychnos* alkaloids. LXXXV. Experiments with derivatives of neobrucidine and neostychnidine; constitution of neofoms. LXXXVI. *iso*Benzylidenedihydrobrucine and oxidation of 11-benzyl- and 11-nitroso-brucine, A., 505, 996.
- Diels, W., and Dornov, A., *Strychnos* alkaloids. LXXXIV. Isomerism of the strychninolines, A., 367.
- and Dornov, A., *Strychnos* alkaloids. LXXXVII. Hydrogenation of the isomeric brucinolones, A., 1389.
- and Grunow, H., *Strychnos* alkaloids. LXXXIII. Perhydrogenation of strychnidine and tetrahydrostrychnine to isomeric bases, A., 367.
- and Paulant, F., fixation of potassium by birds and fish, A., 1523.
- Pommé, B., and Bernard, A., potassium content of the human and animal nervous system, A., 1145.
- Leukel, R. W., and Stanton, T. R., effect of seed treatments on yield of oats, B., 167.
- Leukel, W. A., Camp, J. P., and Coleman, J. M., effect of frequent cutting and nitrate fertilisation on growth behaviour and relative composition of pasture grasses, B., 373.
- Leulier, A., and Adam, S., action of vegetable juices on morphine, A., 671.
- and Bernard, A., potassium [of muscle], A., 377.
- and Paulant, F., potassium changes during incubation of the hen's egg, A., 524.
- Pommé, B., and Bernard, A., muscle-potassium in man, A., 883.
- and Vanhems, G., action of curare and of tetanus toxin on muscle-potassium of the guinea-pig, A., 528.
- Leupin, K., volatile terpenes as acid hydrolysis products of saponins, A., 1503.
- Leutner, R., velocity of hydrolysis of cyclic acetals. II., A., 1465.
- Lev, Gandel, and Semizorov, attaching rubber soles with a self-vulcanising cement, B., 862.
- Leva, E. See Guest, G. M.
- Levaditi, C., and Vaisman, A., curative action of 2:4-diamino-4'-sulphonamidoazobenzene hydrochloride and similar derivatives in experimental streptococcal infection, A., 1159.
- and Voet, J., action of mercury-lamp radiations on various bacteriophages, A., 1542.
- Levaillant, R., symmetrical amyl, hexyl, heptyl, and butyl sulphates, A., 729. Action of methyl chlorosulphonate on methyl acetate; action of methyl sulphate on acetyl chloride, A., 733.
- Levandovski, V. See Broniewski, W.
- Levene, G., Konikov, W., and Massachusetts Memorial Hospitals, density determination by X-rays [photography], (P.), B., 655.
- Levene, H. L. L. See Boots Pure Drug Co.
- Levene, P. A., preparation of crystalline *d*-mannose and of crystalline *d*-ribose, A., 477. Configurative relationships of derivatives of benzylmethyl- and phenylethylmethyl-, methylheptyl-, and methyl-octyl-acetic acids, A., 1121.
- and Compton, J., *d*-xylomethyl-ose (5-deoxyxylose), A., 609. *d*-Gulomethyl-ose (6-deoxy-*d*-gulose) and its relation to a reported inversion of *l*-rhamnose, A., 734. *d*-Xylomethyl-ose and [its] derivatives, A., 1483. Crystalline *d*-gulomethyl-ose and [its] derivatives, A., 1483.
- and Marker, R. E., hydrocarbons derived from phenylmethyl- and phenylethyl-acetic acids, A., 480. Configurative relationship of acids of phenethyl series to those of normal series, A., 1121. Configurative relationship of benzylmethylacetic [α -benzylpropionic] to benzylmethylpropionic [β -benzyl-*n*-butyric] acid, A., 1121. Maximum rotations of configuratively related carboxylic acids containing a phenyl or a cyclohexyl group, A., 1122. Configurative relationship of acids of the isopropyl and isobutyl series to those of the normal series, A., 1482.
- and Rothen, A., Walden inversion. XVIII. Analysis of rotatory dispersion curves of α -substituted *n*-carboxylic acids, A., 14. Analysis of rotatory dispersion of chemically analogous substances, A., 1056.
- Levene, P. A., Rothen, A., and Meyer, G. M., rotations of the nitrophenyl esters of disubstituted acetic and propionic acids and of the corresponding free acids, A., 14.
- and Tipson, R. S., ring structure of thymidine, A., 610, 863. Boric acid reaction and the structure of nucleic acid, A., 1266. Partial synthesis of ribose nucleotides. II. Muscle inosinic acid, A., 1481.
- Lever Brothers, Ltd., non-toxic germicidal detergent or cosmetic [soap] compositions, (P.), B., 641. Non-toxic germicidal, detergent, or cosmetic compositions, (P.), B., 974.
- Leverett, W. H., and Nat. Zinc Co., Inc., raising the sulphur dioxide content of a gas, (P.), B., 591. Sulphuric acid, (P.), B., 591.
- Levi, G. R., and Ghiron, D., action of arsenic acid and arsenates on hydrogen peroxide, A., 939.
- and Peyronel, G., lead chlorite: double and basic salts, A., 1213.
- Levi, H. See Franck, J., and Hevesy, G. von.
- Le Viet Khoa. See Lemarchands, M.
- Levin, B. S., hæmolytic action of lecithins, A., 881. Purification of vaccine lymph by X-rays, A., 899.
- and Lominski, I., action of soft X-rays on bacteria, A., 537.
- Levin, G. See Paget, M.
- Levin, H. L., and Patent & Licensing Corp., aqueous dispersions of rubber, (P.), B., 197. Rubber-like dispersion, (P.), B., 418. Paper-making, (P.), B., 668. Waterproof composition for flooring, etc., (P.), B., 1144.
- See also Kirschbraun, L.
- Levin, I. H., separation of gaseous mixtures, (P.), B., 85.
- Levin, J. I. See Golovati, R. N.
- Levin, S. M., and Kazatschkov, L. I., balance of effluent waters of coke-chemical plant in connexion with their application in quenching of coke, B., 1079.
- Levina, E. J. See Borodulin, M. V.
- Levina, P. J., and Tsurikov, F. F., catalytic transformation of vinyl- and allyl-cyclohexane and allylbenzene, A., 611.
- Levina, T. A. See Tishchenko, V. E.
- Levine, A. A. See Du Pont de Nemours & Co., E. I.
- Levine, D. J., ability of various carbohydrates to replace fats in diets containing dried milk, A., 778.
- Levine, I. See Universal Oil Products Co.
- Levine, M., purification of creamery and packing-house wastes, B., 336.
- Nelson, G. H., Anderson, D. Q., and Jacobs, P. B., utilisation of agricultural wastes. I. Lignin and microbial decomposition, B., 432.
- See also Epstein, S. S.
- Levine, N. D., and Richardson, C. H., synergistic effect of chlorides and bicarbonates of potassium and sodium on paralytic action of nicotine in the cockroach, B., 335.
- Levine, P., and Frisch, A. W., heat-stable agglutinogens in the *Suispestifer* group, A., 1395.
- Levine, V. E., vitamins. I. Fat-soluble. II. Water-soluble, A., 1427.
- and Bien, G. E., differential reactions between carotene and oils rich in vitamin-A, A., 1428. Reaction of trichloroacetic acid and of chloral hydrate with carotene, A., 1551.

- Levine, V. E. See also Andersen, A. C., Fabian, A. A., and Sachs, A.
- Levine, W. T. See Witschi, E.
- Levinge, (Sir) R. V. II. See Bell, R. P.
- Levinson, A. A., decolorised flavouring material, (P.), B., 748.
- Levinson, L. See Kalabuchov, N.
- Levinson, M., micro-determination of urea in blood and urine, A., 1525.
- Levinson-Lessing, F. J., two relations between atomic number and at. wt. of chemical elements, A., 538.
- Levison, L. L. See Lowy, O.
- Leviton, A., and Leighton, A., action of milk fat as a foam depressant, B., 571. See also Leighton, A.
- Levitski, G. A., new fixing-mixtures revealing morphology of chromosomes, A., 231.
- Levins, L. See Marschak, F.
- Levkoev, I. I. See Atabekova, M. A., and Bogdanov, S. V.
- Levoz, T., metallurgical converters, (P.), B., 555.
- Levschin, V. L., relation between absorption and luminescence spectra in weak dye solutions, A., 808. Relation between absorption and luminescence in concentrated dye solutions, A., 1055.
- and Alentzev, M., phosphorescence of calcite, A., 915.
- and Antonov-Romanovski, V. F., phosphorescence. I. Hyperbolic law of decay of phosphorescence, A., 565.
- Antonov-Romanovski, V. F., and Tumerman, L. A., phosphorescence. II. Quenching of phosphorescence by infra-red rays and its application to photography in the infra-red region of the spectrum, A., 565.
- Lévy, A. See Darzens, G.
- Lévy, Gergette. See Macheboeuf, M. A.
- Levy, Gus, treatment of animal furskins, animal hair fibres, etc., (P.), B., 916.
- Lévy, J., experimental alcoholism; mechanism of alcohol tolerance, A., 117. Experimental tolerance to poisons. I. Alcoholism. II. Fixation of alcohol in tissues of animals rendered tolerant. III. Can tolerance to alcohol be considered due to reduced cellular sensitivity? IV. Tolerance of carp to tribromoethyl alcohol, A., 656.
- Köhler, D., and Justin-Besançon, L., relationship between constitution of some amino-ethers and their pharmacological action, A., 397.
- and Olszycka, L., adrenolytic action of phenoxamines in the rabbit, A., 1156.
- and Otterström, K., biological assay of cardiac stimulants; toxicity of a national standard for digitalis powder compared with the international standard, A., 396.
- Levy, J. F., corrosion, B., 191.
- Levy, L., and Byrne, L. J. P., industrial respirators, B., 526.
- Levy, L. A., and West, D. W., chlorination of hydrocarbons, (P.), B., 140.
- West, D. W., and Ilford, Ltd., fluorescent substances [for X-ray screens], (P.), B., 495.
- See also Davis, (Sir) R. H.
- Levy, L. F., constitution of the anthocyanins, A., 1377.
- and Fox, F. W., antiscorbutic value of lucerne, A., 670.
- Lévy, (Mme.) L. W., basic magnesium carbonates, A., 1088.
- Levy, M., titration constants of glyoxaline derivatives, A., 703. Equilibria of basic amino-acids in formol titration, A., 703.
- Levy, S. See Farkas, L.
- Lévy-Bruhl, M., and Cado, Y., soluble toxin from bacillus of pneumonia, A., 665.
- Lévy-Solal, E., and Laudat, M., modifications in composition of the blood of healthy individuals through suppression or addition of salt in the food, A., 642. Salt metabolism in pregnant women, A., 650. Change of equilibrium in the blood and oedema of the pregnant woman, A., 776.
- Levzov, I. See Isabolinski, M.
- Lewers, G. R., revivification of mineral absorbents [from oil refining], (P.), B., 216.
- Lewers, W. W. See Du Pont de Nemours & Co., E. I.
- Lewin, A. I., secondary action of insulin on hypercholesterolaemic rabbits, A., 901.
- Lewin, F. B., and Balzwinik, A. M., acid-base equilibrium and acidity of urine in peptic ulcer, A., 385.
- Lewin, J. See Baudouin, A.
- Lewin, J. U. See Cox, H. E.
- Lewińska, P. See Kamiński, L.
- Lewis, B., and Elbe, G. von, experimental determination of heat capacity of explosive gases; a correction, A., 155. Sodium line-reversal method of determining flame temperatures, A., 465. Anomalous pressures and vibrations in gas explosions; determination of the dissociation energy $2H_2O \rightleftharpoons 2OH + H_2$, A., 586. Heat capacities and dissociation equilibria of gases, A., 702. Experimental determination and theoretical calculation of flame temperatures and explosion pressures, A., 1080. Heat capacity of oxygen at high temperatures from ozone explosions and energy of the Δ -level of the neutral oxygen molecule: correction for the temperature gradient in explosions, A., 1198.
- Lewis, C. H., and Columbia Eng. Corp., gas detector, (P.), B., 616. See also Urbain, O. M.
- Lewis, C. M. See Barnes, R. B.
- Lewis, D., ultra-violet absorption spectra of α - and β -phenylglycosides, A., 805.
- Lewis, E. J. See Park, B.
- Lewis, G. N., genesis of the elements, A., 143.
- and Ashley, M. F., spin of hydrogen isotope, A., 1.
- Livingston, M. S., Henderson, M. C., and Lawrence, E. O., hypothesis of instability of the deuteron, A., 1442.
- Livingston, M. S., and Lawrence, E. O., emission of α -particles from various targets bombarded by deuterons of high speed, A., 141.
- Lewis, Harold (Aigburth), spray-dryer, design and operation, B., 129. Principles of spray-dryer design and operation, B., 785.
- Lewis, Harold (Cardiff). See Rudge, E. A.
- Lewis, H. A. See Du Pont de Nemours & Co., E. I.
- Lewis, H. B., and Frayser, L., metabolism of sulphur. XXII. Cystine content of hair and nails of cystinurics, A., 1008. See also Brown, B. H., Grant, R. L., and Lee, W. C.
- Lewis, H. F., and Gilbertson, L. A., effect of temperature on beating of rag stock, B., 489.
- Lewis, H. J., Ramage, G. R., and Robinson, R., synthesis of substances related to sterols. IV. Derivatives of chrysene, A., 1492.
- Lewis, J. S. See Dorman, Long & Co., Ltd.
- Lewis, J. T., and Rcti, L., failure of crystalline carotene to produce hypervitaminosis-A, A., 668.
- and Turcatti, E. S., pancreatic diabetes in the dog deprived of its sympathetic nervous system, A., 1527.
- Lewis, K. G., and Evans, U. R., films responsible for the temper colours on iron, B., 359. Effect of mill-scale on the rising of paint, B., 636. Orders of merit of ten ferrous materials exposed in different conditions to corrosion at different stations, B., 636. Corrosion below discontinuous oxide coatings, with special reference to magnesium, B., 954.
- Lewis, K. H., and Rettger, L. F., Allen method of evaluating bactericidal action of antiseptics, B., 1163.
- Lewis, L. C., definition of brightness [of paper], B., 943.
- Lewis, M. C. See Western Electric Co.
- Lewis, M. D. See Ham, A. W.
- Lewis, M. R., Work, R. A., and Aldrich, W. W., influence of different quantities of moisture in heavy soil on rate of growth of pears, B., 918.
- Lewis, N. B., photographic materials for scientific use, B., 525.
- Lewis, P. S. See Nat. Processes, Ltd., and Robson, S.
- Lewis, R. H. See Dippy, J. F. J.
- Lewis, R. I. See Shell Development Co.
- Lewis, S. J., quantitative spectroscopy and its analytical applications, A., 315.
- Lewis, W. See Adams, J. M.
- Lewis, W. B., and Bowden, B. V., attempts to detect γ -radiation excited by impact of α -particles on heavy elements, A., 1049.
- Lewis, W. E., brittleness in ductile engineering structural materials, B., 554.
- Lewis, W. H., steel, (P.), B., 106.
- Lewis, W. K., and Squires, L., structure of liquids and the mechanism of viscosity, A., 1313.
- See also Standard Oil Development Co.
- Lewis, W. R. See Rice, F. O.
- Ley, E. See Schiemann, G.
- Leyden, G. B. See Standard Oil Development Co.
- Leyland & Birmingham Rubber Co., Ltd., Reece, W. H., and Jackson, Harold, rubber goods of cellular structure, (P.), B., 369.
- Leymarie, J., determination of moisture in pharmaceutical and food products. I. and II., B., 45, 78.
- Leyst-Küchenmeister, C. See Sommer, L. A.
- Lezhoev, F. M., limit of lime saturation in high-grade cements, B., 1045.
- Li, C. C., and Adams, R., stereochemistry of diphenyls. XL. Effect of temperature and solvent on rate of racemisation of 2-nitro-6-carboxy-2'-alkoxydiphenyls, A., 1364.
- Li, C. F. See Wilson, E. O.
- Li, C. K., sodium hydroxide as substitute for iodine in Robinson's sulphur dioxide method [for determining organic carbon], A., 1258.
- Li, E. K., King, P. S., and Lin, S. S., solvent extraction of soya-bean oil, B., 1003.
- Li, M. K., and Band, W., longitudinal thermo-electric effect. III. Aluminium, A., 1312.

- Li, P. L. See Chu, C. Y.
- Li, R. C., and Dyke, H. B. van, cumulative poisoning by lanadigin, ouabain, and digitoxin in dogs, A., 1275.
- Li, Y. H., and Shih, C., coloured smokes from synthetic dyes, B., 207.
- and Yuan, C. H., preparation of light yellow to dark blue sulphur dyes, B., 183.
- Liadvanski, G. See Kulberg, A.
- Lialine, L. See Breckpot, R.
- Liander, H., decomposition of sodium carbonate solutions, A., 591.
- Liandrat, G., use of selenium unidirectional layer photo-cells in measurement and record of very intense illuminations, A., 188. Rôle of photo-conductivity of the stopping layer in the photo-emission at the surfaces of semi-conductors, A., 1303.
- Liang, P., and Noller, C. R., saponins and sapogenins. III. Sapogenins from *Chlorogalum pomeridianum*, A., 673.
- See also Hanford, W. E.
- Liang, T. H., Ki, C. F., and Iao, L. O., active charcoal from spruce, pine, and bamboo, B., 85.
- Libbey-Owens-Ford Glass Co. See Adams, D., Wampler, R. W., and Watkins, G. B.
- Libbrecht, W., and Massart, L., acetaldehyde and trimethylamine in human pulmonary expiration, A., 112. Oligodynamic action of oxygen on multiplication of yeast-cells, A., 1165.
- Libby, W. F. See Hull, D. E., and Latimer, W. M.
- Liben, I., and O'Bryan, H. M., absorption and reflexion of gold between 380 and 1400 Å., A., 154.
- Libermann, D. See Carré, P.
- Liberson, W. See Faillie, R.
- Liberty Mirror Works. See Colbert, G. F.
- Libinson, I. M., Kukuschkin, I. I., and Morozova, A. S., corrosive action of solutions of ammonium nitrate in liquid ammonia on metals, B., 1091.
- and Miniovitch, M. A., destruction of nitrites and carbonates in nitrates, B., 1141.
- Licata, F. J., metallic soaps, B., 68.
- Lichatschev, M. M. See Karassik, V. M.
- Lichatscheva, A. I. See Lutschinski, G. P.
- Lichoschertsov, M. V., and Alexeev, S. V., β -dihydroxybutane and its derivatives. II. Ethers of ψ -butylene chlorohydrin, A., 606.
- Petrov, A. A., and Alexeev, S. V., formation of phenols in catalytic decomposition of ethyl alcohol by S. V. Lebedev's method, B., 442. New applications of olefines, B., 1084.
- Tsimbalist, B. I., and Petrov, A. A., halogenation of organic compounds; bromination and iodination of aromatic amines by means of *N*-chloroamides, A., 76. Mechanism of iodination of organic compounds by means of chloroamides and oxidising agents, A., 76.
- Lichtenstein, A., urobilin excretion and destruction of blood, A., 107.
- Lichtenstein, N. See Fodor, A.
- Lichtman, S. S., determination of bile salts in body-fluids based on bile-salt hamolysis, A., 234.
- and Stern, E. L., influence of bile salts on the nervous system following intraspinal usage, A., 1411.
- Liddel, U. See Hilbert, G. E., and Wulf, O. R.
- Liddiard, E. A. G. See Moore, H.
- Lide, M. J., concentrator, (P.), B., 834.
- Lidstone, F. M., micro-viscosimeter, A., 1098.
- Lidwell, O. M., and Bell, R. P., reaction between potassium permanganate and oxalic acid, A., 1327.
- Lieb, H., and Zacherl, M. K., simplified apparatus for determination of lactic acid. II., A., 473. Creatine and creatinine metabolism. III. Creatinine determination, A., 654. Determination of creatinine in urine and blood, A., 1142.
- Liebeck, O., tube mill, (P.), B., 787.
- Lieben, F., and Asriel, E., excretion of creatine substances in fever, A., 886.
- and Baumann, B., system sugar-amino-acid-yeast, A., 1280.
- and Jesserer, H., action of ultra-violet rays on solutions of peptone and protein, A., 369.
- and Lieber, H., enzymic liberation of arginine from proteins, A., 252.
- and Molnar, István, behaviour of glycine-alcohol towards yeast shaken with oxygen, A., 897.
- Lieber, E. See Whitmore, W. F.
- Lieber, H. See Lieben, F.
- Lieberknecht, K. See Pügel, W.
- Liebermann, H. [with Kirchhoff, H., Gliksman, W., Loewy, L., Gruhn, A., Hammerich, T., Anitschkoff, N., and Schulze, B.], rearrangement products of succinylsuccinic esters. VI. Formation of quinaeridones from 2:5-diarylaminoterephthalic acids, A., 992.
- Liebesny, P., and Wertheim, H., method of influencing technically useful micro-organisms and ferments, (P.), B., 121.
- Liebhafsky, H. A., catalytic decomposition of hydrogen peroxide by the iodine-iodide couple. IV. Approach to the steady state, A., 42. Kinetic considerations regarding the Riensfeld test in investigation of the nature of a peroxy-compound, A., 173.
- and Mohammad, A., third-order ionic reaction without appreciable salt effect, A., 41.
- See also Bray, W. C.
- Liebowitz, B., washable textile fabrics permeable by air and moisture, (P.), B., 58.
- Liebreich, E., effects of film formation on structure of electrodeposited metallic coatings, B., 997.
- Lieden, F., and Benek, J., degradation of nitrogenous cyclic compounds by animal charcoal, A., 1380.
- Liempt, J. A. M. van, explosions of carbon disulphide-nitric oxide mixtures and their practical applications, A., 1081. Heat of loosening of metals from recrystallisation data, A., 1310. Corresponding states of deformed lattices, A., 1311. Drying apparatus for moist materials, (P.), B., 434.
- and De Vriend, J. A., time of melting of thin fuses, A., 289. Light from [burning] aluminium and aluminium-magnesium [alloy], A., 459. Simple method for determining colour temperature of flashlights, A., 1468.
- and Visser, S. H. R., spectroscopic detection of argon in argon-nitrogen mixtures, A., 54.
- Liénard, A., Peltier and Thomson effects and entropy, A., 20.
- Lieneweg, F., direct determination of absolute water-vapour content of gases by psychrometric and hygroscopic methods, B., 705.
- Liengme, A., and Piquet, J., interferometry of Hirsch; non-specific concentrating power of opzims; (non-specific value of Durupt). I. By exhaustion of the enzymic power of the serum, A., 660.
- Lienhardt, H. F. See Cave, H. W.
- Lienig, G., adhesive foil, (P.), B., 163.
- Liepatov, S. M., and Morozov, A. A., lyophilic colloids. VII. Fractionation of agar and physico-chemical properties of the fractions. VIII. Interaction of agar fractions, A., 932, 1320.
- and Putilova, I. N., lyophilic colloids. VI. Fractionation of gelatin and physico-chemical properties of the different fractions, A., 701.
- Liese, Nowak, A., Peters, and Rabanus, toxicometric determination of wood-preserving agents, B., 357.
- Liesegang, R. E., theory of [photographic] fine-grain development, B., 526. Ripening [of photographic emulsions], B., 783.
- Lieser, T., and Hackl, A., xanthate formation of some polymeric carbohydrates, A., 736.
- and Lechzyck, E., carbohydrates. VI. Xanthate reaction of glucose, A., 1354.
- and Schweizer, R., specificity of hydroxyl groups in sugars, A., 476. Carbohydrates. V. Specificity of sugar hydroxyl groups, A., 1354.
- Lieshout, A. K. W. A. van. See Cohen, E.
- Lieske, R., and Winzer, K., cause of fertilising action of brown coal, B., 325.
- Liévin, O., and Herman, J., autoxidation of hydroxides of iron, manganese, and cobalt, A., 834.
- Lifschitz, E., production of electrons and positrons by a collision of material particles. II., A., 1294.
- See also Landau, L.
- Lifschitz, I., triphenylmethane series. II. Photochemical behaviour and optical activity of triphenylmethyl derivatives, A., 857.
- and Froentjes, W., constitution, optical activity, and photochemical behaviour of platinous complexes. I., A., 1335.
- Lifschitz, L. S. See Leites, S.
- Lifschitz, S. S. See Ushakov, M. I.
- Lifschütz, I., metacholesterol and its separation from cholesterol. V., A., 1363.
- Ligas, A., blood-cholesterol and fat and lipid contents of the adrenal cortex of splenectomised animals, A., 645.
- Liger, J., determination of potential-current curves of electrolytes, A., 306.
- Ligget, T. H., and Dykstra, K., laboratory preparation of absolute ethyl alcohol, B., 203.
- Light, A. B., and Warren, C. R., creatinuria in adolescent males. II. Effects of oral administration of ephedrine sulphate, A., 397.
- Light, A. E., Smith, P. K., Smith, A. H., and Anderson, W. E., inorganic salts in nutrition. XI. Changes in composition of the whole animal induced by a diet poor in salts, A., 243.
- Light, L., benzylcellulose lacquers, B., 860.
- Light Sensitive Apparatus Corporation. See Schoen, V. A.
- Lightfoot, B., Macgregor, A. M., and Golding, E., meteoric stone of Mangwendi, Southern Rhodesia, A., 600.

- Lightfoot Refrigeration Co., Ltd., and Lance, A. E., liquid oxygen explosives, (P.), B., 926.
- Lightner, M. W. See Herty, C. H., jun.
- Ligtenberg, H. L. See Waterman, H. I.
- Li-Jen, Y. See Bergon-Zini, M.
- Likhter, A. See Ruhemann, M.
- Likiernik, A., modern methods of acid decomposition of phosphorites, B., 60.
- Lilienfeld, J. E., electrolytic condenser, (P.), B., 682.
- Nieh, J. K., and Goldman, S., conditions governing formation of highly-insulating anodic layers on aluminium, B., 955.
- Lilienfeld, L., decorated material produced with the aid of, or from, cellulose or cellulose derivatives or compounds, (P.), B., 722.
- Liljestrand, G. See Euler, U. S. von.
- Lillie, R. S., electrical activation of passive iron wires in nitric acid, A., 1326.
- Lilly, C. A., Peirce, C. B., and Grant, D. R. L., effect of phosphates on the bones of rachitic rats, A., 670.
- Lilly, J. H., and Fluke, C. L., control of the cherry case-bearer (*Coleophora prunella*, Clem.) in Wisconsin, B., 327.
- Lilly & Co., E. See Jensen, H., Jones, F. G., Shonle, H. A., and Stuart, E. H.
- Lim, C. S., pharmacological action of taxin, A., 1157.
- Lima, A., jun., treatment [electrolytic purification] of sugar-containing liquids, (P.), B., 329.
- Limaye, D. B., synthesis of γ -resoreylaldehyde dimethyl ether, A., 83.
- and Gogate, G. R., condensation of acetonedicarboxylic acid with phenols and phenolic ethers. II. Formation of 3-keto-7-methoxy-4-methylhydrindenyldienacetic acid, A., 343.
- Limbach, S. See Bauer, K. H.
- Limburg, H., and Patent & Licensing Corp., sulphonation of petroleum oils, (P.), B., 216.
- Limited Co., formerly Skoda Works, surface hardening of austenitic steels and alloy steels, (P.), B., 503.
- Limmer, B. G. See Prideaux, E. B. R.
- Lin, S. S. See Li, E. K.
- Lincoln, A. T., and Hillyer, J. C., Liesegang phenomenon in silicic acid gel, A., 27.
- and Olson, E., modified procedure for the arsenic group, A., 1092.
- Lincoln, B. H., and Continental Oil Co., lubricating oils, (P.), B., 217.
- Henriksen, A., and Continental Oil Co., lubricating oils, (P.), B., 217.
- See also Henriksen, A.
- Lincoln, J. F., arc-welding in the building industry, B., 1098.
- Lincoln, R., detection of illicit rum, B., 1065.
- Lincoln Electric Co. See Jerabek, T. E., and Stine, W. E.
- Lind, S. C., Junger, J. C., and Schiflett, C. H., polymerisation of deuterioacetylene by α -rays, A., 943.
- and Schiflett, C. H., chemical action produced by α -particles: combination of deuterium and oxygen, A., 944.
- Lindau, G., and Rhodius, R., physico-chemical analysis of protein molecules adsorbed at the interface solid-liquid, A., 578.
- See also Enslin, O., and Pfankuch, E.
- Lindbergh, C. A. See Carrel, A.
- Lindblad, A. R., working up auriferous and cupriferos arsenical pyrites, (P.), B., 235.
- Recovery of selenium [from electrolytic slimes], (P.), B., 506.
- Production of sulphur by reduction of sulphur dioxide, (P.), B., 544.
- Production of sulphur by reduction of gases containing sulphur dioxide, (P.), B., 544.
- Recovery of sulphur by reduction of sulphur dioxide, (P.), B., 544.
- Recovery of sulphur [from roaster gases], (P.), B., 803.
- Sulphur, (P.), B., 900.
- Lindblad, B., absorption continuum due to quasi-molecules of calcium in dwarf stars of type M, A., 1046.
- Linde, N. van der. See Böcseken, J.
- Linde, P. van der. See De Jong, H. G. B.
- Linde Air Products Co., and Fraser, W. W., separation of gas mixtures into constituents, (P.), B., 51.
- and Kinzel, A. B., surface-hardening of metallic [e.g., steel] objects, (P.), B., 956.
- See also Wall, M. J.
- Lindemann, H. See Ornstein, L. S.
- Lindemann, E. See Grossfeld, J.
- Lindemann, H., rubber sponge, (P.), B., 113.
- Lindemann, Heinz. See Manegold, E.
- Lindemann, R., emission spectro-photographic determinations of aluminium in ash of biological material, A., 907.
- Lindemann, W., [bundling press for] handling of metal scrap [for remelting], (P.), B., 811.
- Linden, von, biological action of copper, A., 399.
- Linden, A. van der. See De Voogd, J. G.
- Lindenberg, A., partition coefficient of acetone between neutral glycerides or their fatty acids and water; influence of alcoholic function of ricinoleic acid, A., 695.
- Partition coefficient between oil and water of substances completely miscible in the two solvents. I. Methyl alcohol and acetic acid in the system castor oil-water. II. Methyl alcohol, ethyl alcohol, and acetic acid in the system triricinolein-water, A., 696.
- Lindenberger, H., [centrifugal] extractor, (P.), B., 787.
- Lindenfeld, K., organic micro-analysis, A., 369.
- Quantitative micro-analysis of organic compounds, A., 369.
- Linder, G. C., effect of parathyroid hormone and of tuberculosis on serum- and tissue-calcium of guinea-pigs, A., 1263.
- Linderström-Lang, K., electrochemical properties of a simple protein, A., 300.
- and Duspiva, F., keratin digestion in larvae of the clothes moth, A., 1006.
- and Holter, H., enzymic histochemistry, A., 248.
- Enzymic histochemistry. IX. Pepsin in gastric mucosa of pigs. X. Acid localisation in gastric mucosa of pigs. XI. Peptidase in gastric mucosa of pigs, A., 1025.
- Holter, H., and Ohlsen, A. S., enzymic histochemistry. XIII. Enzyme distribution in the stomach of pigs as a function of histological structure, A., 1025.
- Palmer, A. H., and Holter, H., enzymic histochemistry. XIV. Micro-determination of chlorine in tissues, A., 906.
- Weil, L., and Holter, H., enzymic histochemistry. XV. Micro-determination of arginase, A., 784, 1163.
- See also Rasmussen, K. E.
- Lindgren, D. L. See Shepard, H. H.
- Lindgren, W., silver mine of Colquijirca, Peru, A., 1101.
- Waters, magmatic and meteoric, A., 1343.
- Lindholm, H., citric acid content of serum in rabbits with special reference to certain diets, A., 1001.
- Lindner, K., determination of true high-molecular sulphonic acids in textile and tanning agents, B., 617.
- Fatty acid condensation products *versus* fatty alcohol sulphonates [as textile detergents], B., 1090.
- Lindquist-Risakova, E. V. See Sadikov, V. S.
- Lindsay, J. D., and Brown, G. G., thermal properties of hydrocarbons under pressure. II, B., 791.
- Lindsay, R. B. See Wilson, William S.
- Lindsell-Stewart, L. See Rubber Producers' Res. Assoc.
- Lindsey, A. J., electrolytic determination of lead as dioxide and its conversion into lead monoxide by ignition, A., 1338.
- Lindsey, G. S. See Nobel, W. N.
- Lindstrom, A. F. See Westinghouse Lamp Co.
- Lindwall, H. G., and Hill, A. J., condensation reactions of cyclic ketones. III. Oxindole-malonic acid derivatives, A., 758.
- See also Bashour, T. T., Du Puis, R. N., Scudi, J. V., and Zrike, E.
- Line, W. R. See Crowell, C. D., jun.
- Lineberry, R. A., fertilisers and reaction of strawberry soils, B., 690.
- See also Skinner, J. J.
- Linegar, C. R. See Koppanyi, T.
- Linen Industry Research Association, Matthew, J. A., Black, C. P., and Keig, R. J. B., filters, (P.), B., 658.
- Lines, E. W., effect of ingestion of minute quantities of cobalt by sheep affected with "coast disease," A., 1008.
- Phosphorus requirements of sheep. II. Effect of supplying phosphatic supplements to growing lambs depastured on phosphorus-deficient country; field management, B., 248.
- Linev, A. O. See Bechter, A. A.
- Linford, L. H., emission of electrons by swift-moving mercury ions, A., 557.
- Ling, A. W., Muir, W. R., and Nutt, J. D., Longleat experiments, 1927-1931, B., 689.
- Ling, C. See Chang, H. L.
- Ling, S. M. See Shen, T. C.
- Lingane, J. J. See Sandell, E. B.
- Lingle, R. M., assay of boric acid ointment, B., 123.
- Linhart, G. A., interpretation of pressure-volume-temperature relations of single and composite gases, A., 156.
- Linitzki, V., "quadratic form" of inverted polar crystalline space-lattices, A., 918.
- Application of Delaunay's theory of basic parallelepipeds of crystal cell structure to determination of crystalline substances, A., 1214.
- Link, G. K. K., relation of carbohydrate-nitrogen nutrition to development of apple to infection by *Erwinia amylovora*, A., 797.
- Chicago soil-nutrient-temperature tank, B., 421.
- See also Wilcox, H. W.
- Link, K. P. See Baur, L., Morell, S., Niemann, C., and Walker, J. C.
- Link, L. See Standard Oil Development Co.
- Link-Belt Co. See Walker, R. S.

- Linke, R. See Jost, W.
- Linke, W., surface tension sensitivity of viscosity determinations, A., 439.
See also Jakob, M.
- Linnell, L., and Raper, H. S., chromogen of melanuria, A., 235.
- Linnell, W. H. See Hartley, F.
- Linner, E. R., and Gortner, R. A., interfacial energy and molecular structure of organic compounds. III. Effect of organic structure on absorbability, A., 442.
- Linnett, J. W. See Thompson, Harold W.
- Linneweh, F. See Linneweh, W.
- Linneweh, W., and Linneweh, F., glycine deficiency and glycine therapy of progressive muscular dystrophy, A., 383.
- Lino, G., effect of glucose on maintenance of acid-base equilibrium, A., 392.
- Linsenmeier, K., dyeing of staple fibre and staple fibre-cotton mixture yarns with vat dyes in circulating machines, B., 58.
- Linsert, O., photochemistry of ergosterol, A., 81.
- Linstead, R. P., and Rydon, H. N., olefinic acids. XIV. Preparation and additive reactions of Δ^2 -*n*-hexenoic acid; unusual isomeric change in the three-carbon system. XV. Effect of peroxides on orientation of addition of hydrogen bromide to vinyl- and ally-acetic acids, A., 195.
See Barrett, J. W., Boorman, E. J., Dey, A. N., Imperial Chem. Industries, Letch, R. A., and Robertson, J. M.
- Lintern, P. A., and Adam, N. K., influence of adsorbed films on p.d. between solids and aqueous solutions, with special reference to effect of xanthates on galena, A., 442.
- Linton, C. S. See Siebert, W. J.
- Linton, E., coal and natural oil in the Pittsburgh region, A., 724.
- Linton, E. C. See Fairley, A.
- Linton, R. W., and Mitra, B. N., types of specific carbohydrates in the cholera and cholera-like vibrios, A., 786. Proteins and carbohydrates of the cholera and cholera-like vibrios, A., 787. Antigenic structure of *Vibrio cholerae*. VII. Two acid-soluble protein fractions, A., 1168.
- Shrivastava, D. L., and Mitra, B. N., structure of cholera and cholera-like vibrios, A., 1168.
- Lintzel, W., and Mangold, E., biological value of protein of sweet-lupin seed in pig-feeding, B., 875.
See also Mangold, E.
- Liotta, S. See Greenspan, J.
- Liou, O. T., and Wang, S. M., equilibrium between cobalt aquopentammine sulphate and its sulphuric acid solution at 45°, A., 1323.
- Liperoovski, A. S., displacement of isotope series by β -radiation, and isotopy of the rare-earth elements, A., 558.
- Lipetz, M. E. See Gutman, S. M.
- Lipkina, E. See Osipenko, F.
- Lipman, M. R. See Ramsey, W. E.
- Lipmann, F., potentiometric experiments on formation of reducing substances during fermentation, A., 253. Potentiometric determination of oxido-reduction processes in fermenting yeast extract, A., 253. Induction of glycolysis, A., 659.
- Lipp, M., and Bund, E., *epi-isoborneol*. I., A., 496.
- Lipp, P., configuration of borneol and isoborneol, A., 983.
- Lippay, F., and Löning, H., significance of water-soluble, diffusible substances for production of rigidity by iodoacetic acid, A., 1263.
and Patzl, H., rigidity from iodoacetic acid in muscles of cold-blooded animals, A., 1276.
- Lippmann, R. See Nachmansohn, D.
- Lips, E., paramagnetic properties of bivalent chromium salts, A., 436. Temperature dependence of paramagnetism of solid nitric oxide, A., 814.
- Lipschitz, W., micro-determination of halogens in body-fluids and tissues, A., 1436.
- Lipschütz, A., comparative luteinising capacity of the urine of pregnancy and of the menopause, A., 1174.
- Fuente-Alba, A., and Vivaldi, T., fate of prolactin injected into the rabbit, A., 542. Disappearance of prolactin from blood of the nephrectomised female rabbit, A., 1545.
and Vinals, E., oestrogenic gonadotropic substance of anterior pituitary of the guinea-pig, A., 541.
- Lipschütz, M. See Sládek, J.
- Lipshitz, E. V. See Kagan, I. L.
- Lipska, I., biochemistry of bacilli of the *coli-aerogenes* group in milk, A., 407.
- Lipson, H., structure of methylammonium alum, $\text{NH}_4\text{MeAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$, A., 686. Existence of three alum structures, A., 811. Relation between the alum structures, A., 1308.
and Bevers, C. A., crystal structure of the alums, A., 571.
- Lipson, H. C., and Mitchell, A. C. G., quenching of cadmium resonance radiation by foreign gases, A., 1438.
- Liquid Carbonic Corporation. See Minor, H. R.
- Liquier-Milward, J., magnetic susceptibility of cerium chloride in aqueous solution and its variation with temperature, A., 1003.
- Lisbonne, M., Seigneurin, R., and Frank, A., activation of pancreas extract by acidification, A., 123.
- Lishmund, R. E. See Lowry, T. M.
- Lisitzuin, M. A., structure of proteins, A., 268.
- Liskear, M. See Sandin, R. B.
- Lisman, J. H. C., and Keesom, W. H., melting curve of oxygen, A., 1197.
- Lison, L., metachromatism. II. Spectrophotometric study of metachromatic colouring matters, A., 428. Histological significance of metachromasia, A., 511. Determination of intracellular pH by the method of vital stains, A., 1552.
- Lisovski, A. L., orthitic granites of South-West Karamazar, A., 842.
- Lissierici-Dragnanesco, A., preservation of anaesthetic chloroform, B., 748.
- Lissman, M. A., and Internat. Precipitation Co., electrical precipitation [of particles from gases], (P.), B., 237. [Pneumatic] classifier, (P.), B., 786. Centrifugal classifying apparatus, (P.), B., 786.
See also Horne, G. H.
- Lissner, A., heat-resistance of chemically resistant [iron] alloys, B., 650.
and Nemes, A., decomposition of sulphur compounds in coal, B., 534.
See also Kern, H.
- List, G. M., "psyllid yellows" of tomatoes and control of the psyllid, *Paratrioza cocherelli*, Sule., by the use of sulphur, B., 1012.
- List, G. M., and Sweetman, L., collection and analysis of data on the value of non-arsenical insecticides for control of cabbage worms, B., 1012.
- Lister, D. A. See Hercules Powder Co.
- Litarczek, G., Baicoiano, S., and Bals, M., relation between respiration of the red corpuscles, glutathione, and the reticulocytes in secondary anaemias in the rabbit, A., 1007. Corpuscular respiration in secondary anaemias in the rabbit, A., 1007.
- Litschauer, B. See Pestemer, M.
- Litten, W. See Sonn, A.
- Little, E. C. See Bartow, E.
- Little, Inc., A. D. See Carpenter, J. B., jun.
- Littledale, H. A. P., hard-soldering mixtures and processes, (P.), B., 414.
- Littlefield, E. See Baggs, A. E.
- Littlefield, J. B., Yant, W. P., and Berger, L. B., detector for determination of low concentrations of hydrogen sulphide, B., 947.
- Littleford, J. W. See Chapman, G. A.
- Littleton, J. T., effect of temperature treatment on glass-to-metal seals, B., 901.
- Littlewood, E. A. See Imperial Chem. Industries.
- Littmann, E. See Hilpert, R. S.
- Littmann, E. R., thermal decomposition of some dielectric compounds, A., 812.
- Littooy, J. F., and Hercules Glue Co., conditioning [of fruit] by rinse water, (P.), B., 782.
- Litvinov, N. D., and Furmer, I. E., viscosity and density of fused yellow phosphorus over the range 45–90°, A., 22.
- Kriukov, T. A., and Korotshkina, E. A., viscosity of phosphoric acid, A., 290.
- Litvinova, E. V., denitrification in podsol soils, B., 687.
- Litzinger, (Miss) A. See Johnson, T. B.
- Liu, C. T. See Tao, W. S.
- Liu, H. C. See Kao, H. C.
- Liu, S. H., Hannon, R. R., Chu, H. I., Chen, K. C., Chou, S. K., and Wang, S. H., calcium and phosphorus metabolism in osteomalacia. II. Response to vitamin-D of patients with osteomalacia. III. Effects of varying levels and ratios of intake of calcium to phosphorus on their serum levels, paths of excretion, and balances, A., 517, 1010.
- Liu, T., and Chen, C. Y., nutritive value of soya-bean press-cake, B., 379.
- Liu, T. K. See Woo, S. C.
- Liu, Y. M. See Chang, K. S.
- Liutin, L. V., and Gusjatzkaja, E. V., "chalking" of titanium-white, B., 1055.
and Kiriuschkin, V. A., size-frequency analysis of graphite-oil suspensions, B., 392.
- Livanskaja, V. A. See Dijatschkovski, S. I.
- Liverovski, A. A. See Nogin, K. I.
- Liverpool Borax Co. (1933), Ltd. See Millican, T.
- Liverpool Electric Cable Co., Ltd., and Edge, J. W., coloured extruded products of rubber, bitumen, or similar plastic, (P.), B., 320.
and Hughes, A. E., rubber compositions and articles composed thereof, (P.), B., 1006.
- Liverpool Grain Storage & Transit Co., Ltd., and Winter, R. C., preservative treatment of wheat, maize, rice, etc., (P.), B., 747.

- Liverpool Refrigeration Co., Ltd., and Allan, J., tubular heat exchangers applicable to refrigerant condensers and evaporators, (P.), B., 882.
- Liversedge, S. G., ultra-violet rays as a test for stability of anæsthetic ether, B., 173.
- Livierato, S., Vagliano, M., and Dervenaga, A., assimilation of albumin by normal dogs and dogs with Eck fistulae, A., 242.
- Livings, G. See Dunlop Rubber Co.
- Livingston, A. See Loudon, J. D.
- Livingston, J. W., and Monsanto Chem. Co., purification by sublimation, (P.), B., 1075.
- Livingston, M. S., attainment of high vacua in large metal chambers, A., 59.
- Henderson, M. C., and Lawrence, E. O., disintegration of elements by swiftly moving protons, A., 142. Neutrons from beryllium bombarded by deutons, A., 143. Neutrons from deutons and the mass of the neutron, A., 276.
- and Lawrence, E. O., disintegration of aluminium by swiftly-moving protons, A., 7.
- See also Henderson, M. C., Lawrence, E. O., Lewis, G. N., and McMillan, E.
- Livingston, R., and Nurnberger, C. E., kinetic interpretation of colouring of glass by X-rays, A., 1469.
- Livingston, R. S. See Kolthoff, I. M.
- Livovschii, V., 4:7-dimethyloxindole, A., 1131.
- Livraghi, E., heat treatment of liquid hydrocarbons, asphalt oils, and oils in general, or mixtures of same, with methyl and ethyl alcohol, or mixtures of such alcohols, (P.), B., 90.
- See also Soc. Anon. Carburanti Italia.
- Livschitz, G. L. See Iljin, N. F.
- Livschitz, S. E. See Moldavski, B. L.
- Livschitz, V. D. See Kamzolkin, V. P.
- Ljalikov, K. S., physico-chemical interpretation of ripening of photographic emulsions, B., 574.
- Protas, I. R., and Faerman, G. P., iso-electric point of gelatin, A., 822.
- and Smirnov, A. J., preparation of emulsions for reversal, B., 525.
- Ljaskovetz, V. L. See Alexandrov, N. F.
- Ljubarski, E., influence of agronomic factors on cultivation of perilla, B., 166.
- Ljubarski, I., effect of hydrogen impurities on hydrogenation with nickel formate, B., 416.
- Ljubarski, L. D., catalytic chlorination of acetic acid, A., 1350.
- Ljubarski, S., transformation of fatty acids in sulphonation, B., 159.
- Ljubimov, A. L., adsorbents and permutes, B., 848.
- See also Juschkevitch, N. F.
- Ljubimov, P. E. See Komar, N. P.
- Ljungkvis, G. See Landelius, E.
- Llewellyn, E. F., and Watts, A. S., effect of refiring on sagger bodies containing Lawrence County, Ohio, clay, B., 406.
- Lloyd, (Miss) B., bactericidal action of ultra-violet light [on sea-water], B., 528.
- Lloyd, (Miss) D. J., proteins as colloidal electrolytes, A., 300. Recent theories of chemistry of tanning, B., 863. Theory of tanning process, B., 863.
- and Bidder, P. B., titration curves of protein fibres, A., 826.
- and Marriott, R. H., swelling of structured proteins; influence of the reticular tissue on swelling of collagen in water and hydrochloric acid, A., 1522.
- Lloyd, (Miss) D. J., and Moran, T., pressure and water relations of proteins. I. Iso-electric gelatin gels, A., 164.
- Lloyd, G. C., heterogeneity of steel ingots. VII. Bibliography on nitrogen in iron and steel, B., 994.
- Lloyd, H., portable chemical balance, A., 1098.
- See also Allsop, G.
- Lloyd, J. W., and Decker, S. W., factors influencing refrigeration of packages of apples, B., 826.
- Lloyd, T. E. See Matthews, A. G.
- Lloyd, W. E. See Hinshaw, W. R.
- Llusia, J. B., blood-ammonia in eclampsia, A., 385.
- Lo, T. S. See Ts-ai, L. S.
- Lo, T. Y., proteins of mottled gram bean (*Phaseolus mungo*, L. var.), A., 391. Vitamin content of mottled gram bean, A., 391. Nutritional value of Chinese oatmeal, A., 391. Mineral content of mottled gram bean, A., 391. Vitamins-A and -D of Suiyuan vegetable oils, A., 1286.
- Loates, W. F., cellulose lacquers, B., 510.
- Lobanov, D. I., and Bikova, S. V., extraction of soluble substances from meat during cooking, B., 746.
- Lobb, G. W., and Bell, J., high-vacuum cut-off, A., 189.
- Lobeck, H. See Erlenmeyer, H.
- Lobering, J. See Philippi, E.
- Lobley, A. G., use of electric furnaces in industrial heat-treatment. I.—III., B., 360, 554, 593.
- See also Birmingham Electric Furnaces.
- Lobo, R. See Chéramy, P.
- Lobo-Onell, C. See Chabanier, H.
- Lobstein, Flatter, and Raffeld, (Mme.), vine-growing region of Palestine and its wines, B., 1016.
- Lobus, I. I. See Kliukvin, N. A.
- Loch, L., and Redlich, K. A., occurrences of magnesite in Russia, Manchuria, Japan, Sweden, and Norway, A., 469.
- Loch, P., apparatus for quantitative recovery of dialysates, A., 1098.
- Locher, F. See Hartmann, M.
- Locher, G. L., measurement of absolute X-ray intensities and absolute sensitivity of X-ray film with a Geiger-Müller counter, A., 150. Neutrons of high energy from cosmic-ray bursts in aluminium, A., 1442.
- Lochhead, A. G., honey fermentation, B., 379.
- Lochmann, C., determination of potassium formate in used silver baths, B., 105. Heat-conductivity and specific heat of oils, B., 981.
- Lochte, H. L., methods of weighing by swings, A., 1342.
- Lock, G., elimination of aldehydic group as formic acid from aromatic aldehydes. III. Mixed halogeno- and halogenonitro-benzaldehydes, A., 1238.
- and Nottes, G., identification of organic compounds by the mixed m.p., A., 998.
- See also Böck, F.
- Locke Insulator Corporation. See Hawley, K. A.
- Lockemann, G., decomposition of arsine by fine fibrous materials, A., 181. Physiological arsenic and the use of the Kjeldahl flask in its detection, A., 554. Marsh-Liebig method for detecting arsenic, A., 596. Physiological arsenic and use of the Kjeldahl flask in its detection, A., 948.
- Lockemann, G., arsenic content of honey and bees after dusting with arsenical insecticides, B., 428. Disinfection of gas masks [and rooms with formaldehyde], B., 832.
- Gerngross, O., Rülke, K., and Ulrich, W., disinfectant composition, (P.), B., 336.
- Lockey, J. See Distillers Co.
- Lockwood, H. C., hydrogen electrode for p_H determinations, A., 1218. Standards for purity and determination of "ethyl" vanillin [*p*-hydroxy-*m*-ethoxybenzaldehyde], B., 12. Detection and identification of metallic particles in manufactured products, B., 154.
- Lockwood, L. B., Ward, G. E., May, O. E., Herrick, H. T., and O'Neill, H. T., production of fat by *Penicillium javanicum*, var. *Beijma*, A., 535.
- See also Ward, G. E.
- Locuty, P., and Laflitte, P., system sulphuric acid-ammonium sulphate-water, A., 36.
- Lode, G., composition of ringed snake fat, A., 510. Vacuum distillation device, A., 1098. Detection of coal-tar dyes in coffee substitutes, B., 428.
- Lodeesen, H. J. See Tanner, R. R.
- Loder, D. J. See Du Pont de Nemours & Co., E. I.
- Lodge, F. See Imperial Chem. Industries.
- Lodge-Cottrell, Ltd., and Boving, J. O., treatment of waste industrial gases, (P.), B., 1122.
- Loeb, L., Anderson, W. C., Saxton, J., Hayward, S. J., and Kippen, A. A., experimental dissociation of effects of anterior pituitary glands of various species on thyroid and ovary, A., 1544.
- See also Chouke, K. S., and Max, P.
- Loeb, L. B., energy of formation of negative ions in O_2 , A., 1440.
- Loebel, Z. C., and Patent & Licensing Corp., aqueous bituminous dispersions, (P.), B., 394.
- Loebell, H. O., and Doherty, H. L., carburetted water-gas, (P.), B., 485.
- Klees, A. L., and Combustion Utilities Corp., carbonised fuel briquettes, (P.), B., 8.
- Klees, A. L., and Doherty, H. L., carbonisation process, (P.), B., 8.
- Löbering, J., potentiometric titration of sulphite and sulphonylate alone and in presence of hyposulphite, A., 1092.
- Loeck, V. See Kossel, W.
- Löcker, T., and Patat, F., primary process of photochemical decomposition of formaldehyde. II., A., 458.
- Löddesöl, A., instrument for soil sampling, B., 565.
- Loefer, J. B., effect of certain carbohydrates and organic acids on growth of *Chlorogonium* and *Chilomonas*, A., 1539.
- and Hall, R. P., growth of *Chilomonas paramecium* in inorganic media, A., 1027.
- Löffler, H., volatile amines of human urine, A., 1007.
- See also Wacek, A. von.
- Löffler, J., glass-melting with potash containing phosphate, B., 673.
- Löfgren, N. See Brandt, K., and Euler, H. von.
- Löhberg, K., replaceability of zinc by magnesium and vice versa. I. Miscibility of Mg_2Sb_2 and Zn_2Sb_2 and structure of mixed crystals, A., 292. C-Modification of neodymium and lanthanum sesquioxides, A., 686.

- Löhner, H., critical potentials of helium, neon, and argon by the Lenard opposing potential method, A., 273.
See also Behne, R.
- Löhr, W., cod-liver oil salve treatment of fresh wounds, burns, and phlegmonous wounds, A., 1150.
- Loele, W., carbonic acid assimilation by animal cells, A., 112.
- Loenen, W. F. van, and Blake-Smith, L., rotary apparatus for resolving emulsions, (P.), B., 486. Apparatus for treating liquids with solids, (P.), B., 532.
and Petroleum Rectifying Co. of California, dehydrator having a gas pocket, (P.), B., 813.
See also Garrison, M. E.
- Löning, H. See Lippay, F.
- Loeper, M., Bioy, E., Tonnet, J., and Varay, A., carbon monoxide in the blood in illness, A., 774. Increase in blood-carbon monoxide in anaemia, A., 1268.
- Lesure, A., and Mougeot, A., glyoxalines of some foodstuffs, A., 882.
- Lesure, A., and Thomas, A., determination of glyoxaline compounds in urine, faeces, and sera, A., 422.
and Mougeot, A., hydropigenic action of glyoxalines, A., 656.
- Mougeot, A., and Parrod, J., toxic action of glyoxalines, A., 656.
- Perrault, M., Bioy, E., and Lesure, A., glyoxaline compounds in spinal fluids, A., 107.
- Perrault, M., and Lesure, A., retention of glyoxalines in cardio-renal conditions, A., 107. Glyoxalinæmia of paracental origin, A., 107.
and Tonnet, J., blood-carbon monoxide in oxalemia, A., 657.
- Loesch, (Frl.) M. von. See Koenigs, E.
- Loesche, E. C., crushing, grinding, and sifting of soft materials, (P.), B., 338.
- Loeschke, A., pathogenesis of renal dwarfism, A., 333.
- Loesecke, H. W. von, problems in citrus products research, B., 427. Possibilities of preparing alcoholic citrus beverages, B., 1017.
- Loeser, A., reversal of thyroid activity by iodine, A., 410. Effect of the ovary on secretion of thyrotropic hormone, A., 541. Thyroid and ovary; experimental basis for di-iodotyrosine treatment of climacteric disturbance, A., 1544.
See also Eitel, H., and Müller, Reinhard.
- Löther, A. See Lüers, H.
- Loetscher, D. G. See Standard Oil Co.
- Loetscher, E. C., substitute for wood, (P.), B., 309. Water-soluble resins of the phenol-formaldehyde group, (P.), B., 321.
- Löw, A. See Schur, H.
- Löw, E. See Müller, W. J.
- Loew, O., calcium and phosphoric acid in nutritional physiology, A., 393.
- Loewe, D. S. See Radio-A.-G.
- Löwe, H. See Frolich, G.
- Loewe, L. See Biltz, H., and Karrer, P.
- Loewenstein, M., changes occurring in oils for superheated cylinders, B., 179.
- Loewi, O. See Fluch, M.
- Loewy, G., p_H of the contents of the duodenum, A., 884. Effect of loss of bile on some elements of the blood, A., 887. p_H of the duodenal contents in the absence of pancreatic juice, A., 1006. p_H of the duodenal contents in absence of bile, A., 1006.
- Loewy, L. See Liebermann, H.
- Loftus, F., high-lime mortar for leak-proof masonry, B., 1096.
- Logan, K. H., underground corrosion in the south-eastern United States, B., 410.
- Logan, M. A., calcium and ammonium excretion in urine of rabbits, A., 885. Composition of cartilage, bone, dentin, and enamel, A., 1144.
- Loginov, N. E., theory of purification of [beet] juice by lime, B., 648. Working of frozen beets, B., 1063.
and Gelfman, J. A., de-sugaring molasses with regenerated press-cake, B., 1063.
- Loginova, A. I. See Volkovitsch, S.
- Logue, L. H., Daman, A. C., and Denver Equipment Co., thickener, (P.), B., 178.
and Denver Equipment Co., thickener, (P.), B., 387.
and Wallace, H. V., aerators or agitators [for pulp], (P.), B., 658.
- Logvinova, Z. V., and Ivanov, A. G., efficiency of organo-mineral fertilisers, B., 1157.
- Loh, T. C., control of seed-borne diseases of rice, B., 691.
- Lohaus, H., Knoevenagel reaction, A., 81. Diene synthesis with ethyl acetylenedicarboxylate, A., 618.
and Gall, H., syntheses of isomeric phenylbutadienecarboxylic acids. II. Synthesis of isochavicol acid, A., 747.
- Lohmann, A. See Brand, K.
- Lohmann, K. See Meyerhof, O.
- Lohmann, W., compound of caffeine and quinine [hydrochloride], (P.), B., 46.
- Löhne, J. See Frivold, O. E.
- Lohrengel, W. See Dietrich, K. R.
- Lohse, F. See Sears, G. W.
- Lohse, H. W., use of flame spectra in chemical analysis, A., 835. Determination of small amounts of potassium by means of sodium cobaltinitrite, A., 1093.
- Loichot, R. W. See Bahl, J. I.
- Loieq, R., variations of fibrinogen content of the blood in neoplastic affections, A., 1526. "Polypeptidæmia index" in experimental cancer in the guinea-pig, and in neoplastic tumours in man, A., 1526.
- Lokka, L., chemical analyses of Finnish rocks, A., 1479.
- Loleit, H. See Paneth, F. A.
- Lomakin, F., and Arefev, N., use of "chromal" for tanning, B., 469.
- Loman, R., and Zwikker, N. P., validity of Antonov's rule for solid-liquid interface, and measurement of surface tension of solids, A., 160.
- Lomax, R. See Astbury, W. T.
- Lombard, R. See Lespiau, R.
- Lombard, V., and Eichner, C., variation of permeability of palladium to hydrogen just below 200°, A., 928. Permeability of palladium to hydrogen. V. Influence of temperature; experiments with commercial and pure palladium; permeability at low temperatures, A., 1315.
- Lombroso, U., nitrogen metabolism; series 2, A., 113.
and Sarzana, G., phenomena following iodoacetic acid poisoning. III. Oxygen consumption and respiratory quotient in pigeons poisoned by iodoacetic acid after injection of dinitrophenol, A., 530.
and Zummo, C., blood transfusion. I. Biological value of proteins of homologous transfused blood in endogenous nitrogen metabolism, A., 652.
- Lombroso, U., Zummo, C., and Stassi, M., nitrogen metabolism. II. Production of glycine during benzoic acid poisoning, A., 395.
- Lominski, I., catalase of filtrates of bacterial cultures after lysis by bacteriophage, A., 257. Inactivation of bacteriophage by oxidation, A., 1170. Comparative sensitivity of bacteriophages and homologous bacteria to oxidation, A., 1170. Inactivation of bacteriophage by oxidation and reactivation by ascorbic acid, A., 1283.
See also Levin, B. S.
- London, E. S., [urea formation in the liver], A., 242.
- Ivanenko, E. F., and Prochobova, M. J., intermediary metabolism of carbohydrates from angiostomy data. I., A., 111.
and Kotschnev, N., in what form is protein of food resorbed? I., A., 112.
- Kotschnev, N., Rivosch, F. I., Križanovskaja, L. I., Padve, R. R., and Manussova, N. B., phloridzin diabetes. II., A., 1157.
- London, F., and London, H., electromagnetic equations of the superconductor, A., 689. Superconductivity and diamagnetism, A., 689.
- London, H. See London, F.
- Loney, D. R., fire prevention and control [in the varnish factory], B., 239.
- Long, B., influence of the glass phase in glazed ceramic materials, B., 674.
- Long, C. C., Germann, F. E. E., and Blair, J. M., intermittency and the Herschel effect, B., 750.
- Long, E. R. See Seibert, F. B.
- Long, F. L. See Clements, F. E.
- Long, J. D. See Singer, W. E.
- Long, J. E., Heller, V. G., and Darlow, A. E., cystine content of sheep's wool as affected by the protein content of the diet, A., 376.
- Long, K. E., and Harshaw Chem. Co., glaze or enamel, (P.), B., 23.
- Long, M. L. See Morgan, A. F.
- Long, R. H., heater for fluids, (P.), B., 1073.
- Long, T. A., and Potts, W. W., crushing or fracturing machinery, (P.), B., 977.
- Longair, A. K. See Allen, H. S.
- Longchambon, H., sepiolite from Ampan-dravada (Madagascar), A., 726, 842. Mineralogical constituents of clays, especially fuller's earth, A., 1346.
and Migeon, G., definition of sepiolites, A., 1099.
- Longchambon, L., mechanical properties of glass, B., 307.
- Longden, E., soundness of ferrous and non-ferrous castings, B., 358.
- Longinescu, G. G., and Prundeanu, I. I., new experiments for course in inorganic chemistry, A., 600. Determination of hydrobromic acid in presence of hydrochloric acid, A., 1214.
- Longinescu, I. N., comparative chemistry. VI. Oxides, A., 15.
- Longinov, V., and Dzirkal, V., production of absolute alcohol by scrubbing in a column with alcoholic absorbent solutions, B., 41.
- Longley, W. W. See Grout, F. F.
- Longmuir, B., and Turner, W. E. S., influence of temperature on bursting pressure of bottles, B., 100.
- Longo, B. See Bragagnolo, G.
- Longo, G., dioximes. CV., A., 638.

- Longobardi, E., mineral content of petroleum, B., 391.
- Longworth, L. G., theory of diffusion in cell models. II. Solution of the steady state for three diffusing substances, A., 1023. Transference numbers of aqueous solutions of some electrolytes at 25° by the moving boundary method, A., 1078. Mobility of the hydrogen-ion constituent in aqueous mixtures of hydrogen chloride and calcium chloride at 25°, A., 1324.
- and MacInnes, D. A., bacterial growth with automatic p_H control; apparatus; acid production by *Lactobacillus acidophilus*, A., 1282.
- Longview Fibre Co. See Wollenberg, H. L.
- Lonsdale, T., small constant-humidity chamber, B., 530.
- See also Denham, W. S.
- Lonza Elektrizitätswerke & Chemische Fabrik Akt.-Ges., concentrated nitric acid, (P.), B., 21. Improvement of tars, (P.), B., 1033.
- Loofbourov, J. R. See Heyroth, F. F.
- Lootmann, H. See Jacob, Arthur.
- Loomis, A. G. See Ambrose, H. A.
- Loomis, E. G., means for crushing [and mixing] viscous and other substances, (P.), B., 177. Apparatus for mixing and kneading plastic materials, (P.), B., 1075.
- Loomis, F. W., and Watson, T. F., band spectra of AgO and CuO, A., 1188.
- Loomis, G. A., sagger bodies, B., 271.
- Loomis, J. H., McKinney, J., and Vapor Treating Processes, Inc., treatment of metallic salt solutions, (P.), B., 1092.
- Loomis, R. N., and Bogen, F., blood-glutathione in tuberculosis, A., 519.
- Loomis, W. E., translocation and growth balance in woody plants, A., 794.
- and Wilson, J. J., boron-iron relationship in the growth of tomato, B., 1011.
- See also Tottigham, W. E.
- Loon, J. van, properties of priming paints [for iron], B., 464.
- See also Steger, A.
- Loonam, A. C. See Gleason, G. H.
- Looney, J. M., and Childs, H. M., lactic acid and glutathione contents of the blood of schizophrenic patients, A., 888.
- Loop, J. F., new Minnesota Babcock test reagent, B., 1066.
- Loose, K. D. See Loose-Wiles Biscuit Co.
- Loose-Wiles Biscuit Co., and Loose, K. D., cereal food products [biscuits], (P.), B., 523.
- Lopatina, E. P. See Malinovsky, F. S.
- Lopatkin, J. M., double salt of copper chloride and lithium chloride, A., 1332.
- Lopatto, E. K., and Firschtenberg, N. K., continuous preparation of superphosphate by the atomising method, B., 802.
- and Savinaev, A. M., solubility of sulphur dioxide in sulphuric acid, A., 292.
- Senger, A. I., and Mischnaevskaja, M. M., acid-resistant plaster for sulphuric acid towers, B., 308.
- Lopez, A. W., [report of Philippine] entomology department, B., 374.
- López, R. C., butter derived from goats' milk, B., 475.
- Lopovich, I. See Sergievskaja, S. I.
- Loppacker, A., electric furnace, (P.), B., 858.
- Lops, S. See Crepaz, E.
- Lorains, J. P. See Doulton & Co.
- Lorand, E. J. See Hercules Powder Co.
- Lorang, H. F. J. See Peski, A. J. van.
- L'Orange, J. See Furter, M.
- Lorber, G. See Barrenscheen, H. K.
- Lord, C. J., fuel briquettes, (P.), B., 661.
- Lord, C. S. See Warren, H. V.
- Lord, G. R., and Sinclair Refining Co., dewaxing of hydrocarbon oils, (P.), B., 217. Coking hydrocarbon oils, (P.), B., 537.
- Lord, W. M., cores for foundry moulds and bonding agents therefor, (P.), B., 638.
- See also Ermen, W. F. A.
- Lorente, L., influence on metabolism of addition of small amounts of cystine to protein-deficient diets, A., 1153.
- Lorenz, C. F. See Sheldon, H. H.
- Lorenz, F. W., and Almquist, H. J., effect of malvaceous seeds on stored-egg quality, B., 604.
- Lorenz, K., lime-soap formation [in water] and its prevention by protective colloids, B., 784.
- Lorenzola, F., electrically-heated germinator with sterilisable plates, thermoregulator for temperatures of 10–50°, and continuous constant water-flow, A., 465.
- Large, I. See Zerban, F. W.
- Lorig, C. H., copper alloyed with steel, B., 728. Deoxidation and degasification of non-ferrous casting alloys, B., 1049.
- and Smith, C. S., effect of copper in malleable iron, B., 1046.
- See also Epstein, S.
- Loring, A. D. See Warren, B. E.
- Loring, H. S., and Du Vigneaud, V., synthesis of crystalline cystinylglycine and benzyleysteinylglycine and their isolation from glutathione, A., 1486.
- See also Du Vigneaud, V.
- Loring, R. A. See Green, J. B.
- Los Angeles Testing Laboratory. See Howe, C. S.
- Losana, L., and Gorla, C., ternary system copper-silver-cadmium, A., 158. Structure of cadmium antifriction alloys, B., 551.
- and Rossiguoli, G., cement-talc mixtures, I., B., 271.
- Losev, N., tanning Greenland sealskins, B., 818. Treating cod skins, B., 916.
- Lothian, (Miss) O. M. See Baker, W.
- Lothrop, W. C. See Fieser, L. F.
- Lotmar, W., representation of potential curves for diatomic molecules, A., 432.
- Lott, W. A., and Christiansen, W. G., new series of urethanes, A., 486.
- Lottemoser, A., influence of atmospheric carbon dioxide on surface tension of sodium salts of fatty acids, A., 294.
- and Baumgürtel, B., influence of atmospheric carbon dioxide on surface tension of aqueous solutions of sodium salts of fatty acids, A., 161.
- and Haenel, E., kinetics of decomposition of sodium mercurisulphide by water, A., 1083.
- and Schwarz, F., swelling phenomena in treatment of cellulose with alkalis and acids, and influence of oxygen on cellulose xanthate, B., 1135.
- and Wilhelmi, T., fine wood fibres as colloid electrolytes, A., 301. Composition and properties of mucilage (kittstoff) obtained as a by-product in manufacture of wood pulp, B., 623.
- Lotze, J. C., modified bulb pipette, A., 1098.
- Lotzmanova, M. See Essin, O.
- Loubatières, A. See Hédon, L.
- Loucks, R. D. See Kiehl, S. J.
- Louden, C. R. See Dodd, F. R.
- Louderback, G. D., age of the earth from sedimentation, A., 1099.
- Loudon, J. D., 2,4-dinitrodiphenylsulphonates, A., 739. Mercury derivatives of camphor. II, A., 755.
- and Livingston, A., exchange of sulphonyl groups in thiolsulphonic esters, A., 1114.
- Lougary, F. G., and Conrey, G. W., use of sodium oxalate and carbonate in dispersing soils for mechanical analysis, B., 243.
- Loughborough, W. K. See Stamm, A. J.
- Loughlin, K. C., and Celanese Corp. of America, stripping [of coloured cellulose ester and other rayons], (P.), B., 303.
- Louis, L. See Abel, F. A. E.
- Louisville Cement Co. See Wechter, E. J.
- Louisville Paint & Varnish Production Club, glycerol phthalate resins in tinted quick-drying house paints, B., 31.
- Lourau, M. See Girard, P.
- Loury, M. See Dufraisse, C.
- Louveau, G., Atlas cedar-wood oil, B., 45. Removal of terpenes from essential oils, B., 701.
- Louvier, R., micro-chemistry of pigmentation of ear-lobes of the cock, A., 234.
- Louw, J. G., determination of soluble ash in plant material, A., 552.
- Love, A. See Venesta, Ltd.
- Love, L., jun. See Lutz, R. E.
- Love, T., Gattermann hydroxy-aldehyde synthesis, A., 620.
- Loveless, A. H., drying of solids, B., 1121. Experimental cream-canning, B., 1161.
- Lovell, H. W., and Brown, J. R., results of repeated determinations of the blood-cerebrospinal fluid barrier, A., 881.
- Lovell, W. G., Campbell, J. M., and Boyd, T. A., knocking characteristics of hydrocarbons, B., 887.
- See also Campbell, J. M.
- Lovern, J. A., fat metabolism in fishes. IV. Mobilisation of depôt-fat in salmon. V. Fat of salmon in its young freshwater stages. VI. Fats of some plankton *Crustacea*. VII. Depôt-fats of certain fish fed on known diets, A., 242, 653, 1151.
- See also Edisbury, J. R.
- Low, A. J., soil profiles developed on carboniferous limestone in Somerset and Derbyshire, A., 324. Soil profile in view of field studies in Somerset, Derbyshire, and Cheshire, A., 324.
- Low, G. W., jun. See Furman, N. H.
- Low Temperature Carbonisation, Ltd., and Bristow, W. A., plant for distillation of coal and other carbonaceous substances, (P.), B., 837.
- Low Temperature Processing Co. See Zorn, W. M.
- Lowanee, F. E., and Constant, F. W., variation with magnetic field and temperature of thermo-electric properties of ferromagnetics, A., 1196.
- Lowater, F., band spectrum of zirconium oxide, A., 1051.
- Lowe, A. See Davies, W. H.
- Lowe, A. R. See Imperial Chem. Industries.
- Lowe, B. See Nelson, P. M.
- Lowe, C. W., and Moyse, A. V., algae of Manitoba soils, A., 661.
- Lowe, J., vertical chamber ovens for carbonisation of coal, (P.), B., 87.
- Lowe, W. G., and Brown, D. J., kinetics of oxidation of nitrous acid by chloric and bromic acids, A., 173.

- Lowe, W. G., and Hamilton, C. S., arsenicals containing the furan nucleus, A., 997.
- Lowell, J. H., evap-o-rotor; device for comparing the evaporation rates of lacquer solvents, B., 860.
- Lowen, L., and Benson, H. K., preparation of plastics from ground wood pulp, B., 562.
- Lowenfeld, M. F. See Widdows, S. T.
- Lowenheim, F. A. See Hammett, L. P.
- Lowery, H., Bor, J., and Wilkinson, H., optical constants of the copper-nickel alloys, A., 1065.
- Lowig, E., influence of potassium salts, especially of the anions, and of silicic acid and nitrogen, on resistance to mildew of cereals and fodder crops, B., 1060.
- Lowndes, A. G., methylene-blue as a stain for mucus, A., 1399.
- Lowry, C. D., jun., Egloff, G., Morrell, J. C., and Dryer, C. G., inhibitor dyes in cracked gasoline, B., 614.
- Smith, M. A., and Murphy, G. B., standardised test of gasoline colour stability, B., 614.
- See also Dryer, C. G., and Universal Oil Products Co.
- Lowry, E. F. See Westinghouse Electric & Manufg. Co.
- Lowry, R. D. See Dow Chem. Co.
- Lowry, T. M., polarimetric methods in chemistry, A., 182. Formulae and equations in nuclear chemistry, A., 277. Origin of optical rotatory power, A., 1056.
- and Baldwin, W. C. G., rotary dispersion of organic compounds. XXVI. Acetoin, A., 809.
- and Lemon, J. T., blue flame in the system nitrogen pentoxide-ozone, A., 593. Oxides of nitrogen. I. Binary system N_2O_4 - N_2O_5 , A., 824.
- and Lishmund, R. E., rotary dispersion of organic compounds. XXVII. Menthone and carvomenthone. XXVIII. Ultra-violet absorption of ketones, A., 809, 1305.
- See also Baldwin, W. C. G.
- Lowy, A. See Arnold, C. L., and Silver, S. L.
- Lowy, O., and Levison, L. L., lead absorption and lead poisoning; clinical and pathological analysis of 100 cases, A., 657.
- Lozier, W. W., dissociation products of carbon monoxide formed by primary electron impact, A., 46.
- Smith, P. T., and Bleakney, W., H^3 in heavy hydrogen, A., 1448.
- See also Selwood, P. W., and Smith, P. T.
- Lozinski, N., and German, S., determination of specific heat of refractory materials at high temperatures, B., 61.
- See also Kukolev, G. V.
- Lozovoi, A. V., and Diakova, M. K., chemical composition, properties, and methods of treatment of primary tar from Tcheliabinsk lignites; berginisation of the tar, B., 53. Composition, properties, and methods of treatment of Tcheliabinsk primary brown-coal tar. I. Destructive hydrogenation of the tar, B., 789.
- See also Diakova, M. K.
- Lozowski, I. M. See Nesterenko, L. L.
- Lu, D. H. See Mumm, O.
- Lu, S. S., scattering of X-rays by polyatomic gases, A., 686.
- Lu, T. W. See Hsu, C. F.
- Lubarsky, G. D. See Kagan, M. J.
- Lubatti, O. F., determination of fumigants. I. Residual hydrocyanic acid in stored products, B., 928.
- See also Page, A. B. P.
- Lubri-Zol Corporation. See Prutton, C. F.
- Lubs, H. A. See Du Pont de Nemours & Co., E. I.
- Lucas, A. R. See Wagner, W. G.
- Lucas, C. C. See Ross, J. R.
- Lucas, C. D. See Quimby, E. H.
- Lucas, F. B. See Easton, E. C.
- Lucas, G. H. W., initial effect of some anæsthetic substances on movements of cilia and smooth muscle, A., 893.
- Lucas, H. J., Prater, A. N., and Morris, R. E., reaction between oxygen and 4 β -butene, A., 728.
- Lucas, J. H., and Nichols Copper Co., metal [copper] powders, (P.), B., 314.
- Lucas, M., variation of length of a cement [test-piece] with atmospheric humidity, B., 902.
- Lucas, N. S. See Gulland, J. M.
- Lucas, O., and Wentrupp, H., carbon solubility of iron-chromium-silicon alloys, A., 23.
- Lucas, O. D. See Whessoe Foundry & Eng. Co.
- Lucas, P. S. See Gould, I. A.
- Lucas, R., and Grassner, F., application of catalytic reactions in qualitative and quantitative microanalysis, A., 711.
- Lucas, V., preparation of mercury salves using ferric chloride, B., 45. Changes undergone by sodium bicarbonate, B., 60.
- Lucas, Ltd., J., and Merriek, J., [rubber-covered] electric accumulator plates, (P.), B., 68.
- and Watson, E. A., manufacture of permanent magnets [from alloys requiring heat treatment], (P.), B., 908.
- Lucentini, R., and Drago, E., new butter number, B., 1115.
- Luchetti, G., bacterio-chemical determination of assimilability of phosphoric anhydride in soils, B., 740.
- Luehinski, G. P., viscosity of sulphuric acid and its chlorides, A., 1064.
- Lucia, S. P., and Brown, J. W., suspension stability of erythrocytes in solutions of gum acacia, A., 372.
- Lucignani, D., variations in fat content of human milk during suckling, A., 1398.
- Luck, J. M., Davis, B. L., jun., and Winkle, W. van, jun., effect of administered glucose on aminonitrogen content of the blood, A., 1393.
- and Richmond, G. M., stimulation of adrenal medulla by irradiated insulin, A., 1422.
- Lucké, B., effect of temperature on osmotic equilibrium of living cells (unfertilised eggs of *Arbacia punctulata*), A., 1012.
- and Harvey, E. N., permeability of living cells to heavy water, A., 1012.
- Larrabee, M. G., and Hartline, H. K., studies on osmotic equilibrium and on kinetics of osmosis in living cells by a diffraction method, A., 1520.
- Lucke, C. E., and Babcock & Wilcox, Ltd., heat-transfer apparatus, (P.), B., 289.
- Water-gas, (P.), B., 982.
- Luckey, G. P., and Bacon, E. F., detection of combustible vapours, (P.), B., 11.
- Luickmann, H., Thomas slag and progress in calcium phosphate fertilisers, B., 422.
- Luckow, C., enquiries from practice [of the Institut für Gärungsgewerbe (A.T.L.), Berlin], B., 76. Loss of alcohol on storing spirits in bottle, B., 330. Determination of alcohol and extract content, using the distillation method and hydrometer, B., 1017.
- Lucy, F. A. See Leighton, P. A.
- Luczynski, Z. See Elmer, A. W.
- Ludány, G. von. See Kokas, E. von.
- Ludewig, H. See Hahn, G.
- Ludewig, W. See Brückner, H.
- Ludin, W. See Hephaest A.-G. f. motorische Kräfteerzeugung.
- Ludlam, E. B., green flame of phosphorus hydride, A., 1443.
- Ludloff, H., magnetisation function for ferromagnetic substances applicable to all temperatures, A., 19.
- Ludlum Steel Co. See De Fries, H. A.
- Ludmila, J. See Šimek, B. G.
- Luduena, F. P. See Leti, L.
- Ludwiczakówna, (Mlle.) R., and Suszko, J., stereochemical studies. III. Connexion between optical rotation and configuration of quinine alkaloids, A., 765. Rearrangement of hydrocinchonine by esterification in two stages, A., 765. Demethylation of quinidine, A., 996.
- Ludwig, G., influence of polarisation of the inner electron in the field of the outer [electron] on the spectral terms of a two-electron system (especially helium), A., 135.
- Ludwig, Hans. See Mumm, O.
- Ludwig, Herbert, toxicology of pyridine and its homologues (Wernicke encephalitis), A., 1156.
- Ludwig, T. See Gordonoff, T.
- Ludwig, W., causes of "chalking" of white exterior paints, B., 509. Causes and prevention of separation and floating of pigments in paints, B., 913.
- Ludwik, P., and Krystof, J., corrosion protection under varying conditions, B., 410.
- Lüde, R., Brazilian oiticica oil, B., 364.
- Lüdecke, H., influence of stand, nitrogen, and cultivation on yield and quality of sugar beet, B., 690.
- See also Krüger, W., and Wimmer, G.
- Luedeke, A. W., and Combustion Utilities Corp., dehydration of synthetic resins, (P.), B., 1153.
- Lüdicke, W. See Kraiss, P.
- Lüdke, W. See Scheumann, K. H.
- Lüdtke, M., formation and organisation of plant-cell membranes, A., 672. Behaviour of cellular and fibrous materials in solutions of salts, B., 142. Acid groups of cellular and fibrous substances. II., B., 623. Acid content of rayon and its determination, B., 1087.
- See also Krüger, D.
- Lüers, H., development of enzymes in malt, A., 1164.
- and Geiger, O., hordein content of malt, B., 744.
- Krauss, G., Hartmann, O., and Vogt, H., mashing process, B., 202.
- and Löther, A., following enzyme reactions viscosimetrically, B., 424.
- and Miller, P. von, determination of barley extract, B., 603.
- and Rümmler, W., development of amylase during germination of barley, A., 249.

- Lühdemann, R., variation with concentration of equivalent refraction of some salts and acids in aqueous solution, A., 932.
- See also Fajans, K., and Meyer, K. H.
- Lühder, E., chemical report on spent washes and wash-diseases, B., 569.
- Lühl, H. A. See Freitag, R.
- Lüke, J. See Fricke, R.
- Lüneburger Isoliermittel- & Chemische Fabrik Akt.-Ges., manufacture of [thermal-insulating material by using magnesium carbonate, (P.), B., 257.
- Lüppo-Cramer, distribution of nuclei with solarisation and their removal, A., 458. Bleach-out images by diffuse after-exposure, A., 590. Fog formation by dyes, A., 1087. Topographical relations in image reversals, A., 1331. Production of fogging by dyestuffs, B., 607. Grain isolation by dyes, B., 607. [Photographic] over-sensitisation, B., 607. Acceleration of development by thiocarbamide, B., 655. Noteworthy bleaching-out, B., 750. Fogging of silver bromide [photographic] plates by dyes, B., 783. [Photographic] sensitisation by "Herschel treatment," B., 1069.
- Lütgen, T. See Ferich, R.
- Lüthje, H., preparation of an adjunct in baking from starch, (P.), B., 1116.
- Luffin, G., Flexon, F., and Owens-Illinois Glass Co., glass-melting furnace, (P.), B., 902.
- Lugovkin, B. P. See Arbusov, A. E., and Postovski, J. J.
- Lühr, O., triatomic ions in mixtures of hydrogen isotopes, A., 557.
- and Harris, L., mass-spectrograph determination of the relative abundance of heavy hydrogen in a sample, A., 1335.
- Luikov, A. V. See under Lykov, A. V.
- Luisi, L., cultivation of *Andropogon citratus*, D.C., B., 566.
- Lukashevitch, V. O., preparation of benzidine bases, A., 337. Sodium amalgam with iron impurity, A., 590. Reduction of aromatic nitro-compounds. I, A., 1113.
- and Vorosheilova, M. A., reduction of nitro-compounds with cast-iron filings, A., 1113.
- Lukashevitch-Duvanov, I. T., determination of slag inclusions in siliceous iron, B., 410.
- Lukaszewicz, W., reversion of superphosphate in soil, B., 116, 602.
- See also Bekier, E.
- Lukens, H. S., mechanism of conductance, A., 705.
- Lukeš, R., and Grossmann, O., action of ethylene dibromide on *N*-methylpiperidine, A., 1250. 1:1'-Dimethyl-2:3'-dipiperidyl, A., 1252.
- See also Votoček, E.
- Lukijanov, S. Y. See Kiselev, P. V.
- Lukina, M. T. See Kuzminich, I. N.
- Lukirski, P. I., and Hurgin, J. L., selective photo-effect, A., 1191.
- and Zarewa, T., slow neutrons, A., 1441.
- Lukova, S. D. See Budnikov, P. P.
- Lulek, R. N. See Du Pont de Nemours & Co., E. I.
- Lum, J. H., and Curtis, H. A., coal carbonisation—plastic stage, B., 1028.
- Lumb, C. See Edmondson, J. H.
- Lumb, C. F., aggregates for concrete, (P.), B., 24.
- Lumière, A., and Brun, H., injectable calcium salts, A., 782.
- and Meyer, P., colloidal nature of anaphylactic precipitates, A., 116, 644. Colloidal characteristics of serum after contact with starch, A., 644. Colloidal characteristics of the anaphylactic reaction *in vitro*. II. Variation of the proportion antigen-antibody, A., 895.
- and Sonnery, S., anticoagulating properties of gold and other salts, A., 104. Anticoagulant properties of the pyrogenic products of citric acid, A., 1519.
- Lummus Co. See Coubrough, G. B.
- Lumsden, C. H. See Imperial Chem. Industries.
- Lumsden, T., and Macrae, T. F., stabilisation and purification of specific anticancer bodies, A., 236.
- Lund, A. A., Anthony, R. S., and Producteurs de Sucre d'Erable de Quebec, treatment of maple syrup, (P.), B., 694.
- Lund, E. J. See Rosene, H. F.
- Lund, H., pyridylnitro-pyrazole. II. Derivatives of 4-nitro-5-pyridylpyrazole, A., 760.
- Lund, J., characteristics of train [marine-animal] oils, and effect thereon of outside factors, B., 560.
- Lund, N. B. See Fischer, A. J.
- Lunde, G., and Mathiesen, E., do fish conserves contain formalin? B., 698.
- Mathiesen, E., and Mikkelsen, E., olive oil; examination of imported olive oils (1932—1933), B., 463.
- Lundegårdh, H., absorption of ions by living cells, A., 1037. Soil properties and fertiliser requirement, B., 566. Influence of soil on growth of the plant, B., 867.
- and Burström, H., respiration of roots of plants, A., 794.
- Lundgren, H. P., chemical relationships between compounds of physiological importance having the phenanthrene nucleus, A., 1275.
- Lundin, H., Ellburg, J., and Riehm, H., rapid Kjeldahl determination of nitrogen, A., 1258.
- Lundquist, J. T. See Dow Chem. Co.
- Lundsgaard, E., and Wilson, A. T., muscle-phosphorus compounds in adrenal insufficiency, A., 258.
- Lundstedt, E., converting average whole milk into soft curd milk, B., 43.
- Lundstrom, F. O. See Whittaker, C. W.
- Lunevale Products, Ltd. See Leech, H. L.
- Lunt, G. P., and Badger & Sons Co., E. B., concentration of dilute aliphatic acids, (P.), B., 262.
- Lunt, H. A., distribution of soil moisture under isolated forest trees, B., 163. Modified procedure in nitrogen-transformation studies in forest soils, B., 866.
- Lunt, R. W., and Mills, J. E., blue glow on surfaces at -180° attributed to NH or NH_2 molecules, A., 805.
- Mills, J. E., and Smith, E. C. W., Schuster bands of ammonia, A., 805.
- Pearse, R. W. B., and Smith, E. C. W., new band system of NH_2 , A., 679. Band spectrum of NH_2 , A., 912.
- Lupas, I. See Secareanu, S.
- Lupton, A. W., preparation of a dry extract of *ipecaacuanha*; notes on *ipecaacuanha* root of commerce, B., 253.
- Lure, A. I., paper from cotton stems, B., 446.
- Lure, S. N. See Sagaidatschni, A. F., and Stender, W. W.
- Lurie, E., wetting agents, (P.), B., 940.
- Lurie, G. See Pakschver, A.
- Lurie, J. J., determination of titanium in ferrous alloys, B., 410.
- Lurie, S. N., and Gorelik, K. S., [production of] dilute solutions of hydrogen peroxide by electrolysis, B., 671.
- and Petrova, M. S., preparation of sodium persulfate, B., 671.
- Luschenowsky, A., magnesium alloy, (P.), B., 66.
- See also Briske & Pohl.
- Lush, R. H., monthly clipping of pastures, B., 919.
- and Fletcher, J. L., pasture fertilisation results, B., 248.
- Lushetski, A. A. See Ivanov, K. I.
- Luske, B., food value of stems and leaves of artichokes, B., 251.
- Lustig, A. See Isser, G.
- Lustig, B., state of combination of protein degradation products on passage into the blood, A., 103.
- and Mandler, E., globulin and albumin fractions of serum. VII. Tyrosine and cystine contents of protein fractions of fluids from sarcoma, carcinoma, and liver (in cirrhosis), A., 1001.
- Luten, D. B., jun., application of the Rayleigh interferometer to the measurement of reaction velocity, A., 586.
- Lutenberg, C., preparation of pure claidic acid and the claidin reaction, A., 960.
- and Dudkina, T., comparison of known methods for determination of solid unsaturated fatty acids in presence of saturated fatty acids, B., 732.
- and Ivanov, S., oil of *Berteroia incana* (grey cress-seed oil), A., 1434. Thorn-apple-seed oil, B., 560. Henbane-seed oil, B., 640.
- and Mirer, E., rapid determination of crude fibre in oil seeds and cake, B., 747.
- and Rosenberg, T., rapid determination of hull content of sunflower-seed press-cakes and meal, B., 462.
- Luther, R., thermodynamical problem, A., 301.
- and Staude, H., testing of German standard DIN 4512 for practical exposures, B., 574.
- Luthi, R. See Weigle, J.
- Luts, K. J., composition of kerogen present in shale, and the influence of various factors on the oil yields from the kerogen, B., 1028.
- Lutschinski, G. P., effect of temperature on viscosity of tetrachlorides of elements of fourth group of periodic classification, A., 438. Temperature coefficient of viscosity of inorganic acid chlorides, A., 925. Diffuse dispersion of light in white, non-metallic sols, A., 1318.
- [with Lichtseheva, A. I.], mixed polyhalides of titanium, A., 1470.
- and Altman, E. S., relation between scattering and absorption light in sols of silver, silver chloride, and colophony, A., 279.
- Lutwak, H. See Walter, Georg.
- Lutwak-Mann, C. See Parnas, J. K.
- Lutz, H. J., ecological relations in Pitch Pine Plains of Southern New Jersey, B., 1009.

- Lutz, K., glazed coatings [on constructional materials], (P.), B., 25.
- Lutz, L., soluble enzymes secreted by *Hymenomyces*; cytotoxicity of cellulose, A., 124.
- Lutz, R. E., and Eisner, W. M., di-*p*-bromophenylfurans and α -diketones, A., 352.
- Love, L., jun., and Palmer, F. S., reduction of unsaturated 1:4-diketones with zinc combinations; formation of the cyclic bimolecular products, A., 1499.
- and Palmer, F. S., catalytic hydrogenation of unsaturated 1:4-diketones, A., 1499. Structures of bimolecular reduction products of dibenzoyl ethylene, A., 1499.
- and Small, L., reduction in morphine series. IV. *allo- ψ* -Codeine, A., 99.
- Tyson, W. R., Sanders, A. G., and Fink, C. K., 2:3:5-triphenylfurans and related saturated and unsaturated α -diketones, A., 352.
- See also Small, L.
- Lutzenko, N. A. See Grodzovskaja, R. I.
- Lux, E. See Koppers Co. of Delaware.
- Lux, H., measurement of oil-holding capacity of waxes, B., 560.
- Lux, L. See Schmitt, H.
- Lux, L. A., and Lux Electrolyzer Service, Inc., water-softening composition and method, (P.), B., 532.
- Lux Electrolyzer Service, Inc. See Lux, L. A.
- Luyet, B. J., death of a yeast culture as registered by electrical resistance, A., 124.
- Luyken, A. See Zeidler, G.
- Luz, G., metabolism of *Fusarium lycopersici* and *F. lini*, A., 535.
- Lvov, A., oxytrophism and oxytrophic organisms, A., 899. Nitrogen and carbon nutrition of *Polytonella agilis*, A., 1166.
- and Dusi, H., oxytrophism and nutrition of flagellated leucophytes, A., 254. Nitrogenous and carbonaceous nutrition of *Chlorogonium euchlorum* in the dark; acetic acid as a product of chlorophyll assimilation, A., 1289.
- and Provasoli, L., nutrition of *Polytona caudatum*, var. *astigmata* (colourless Chlamydomonadine), and synthesis of starch by leucophytes, A., 785.
- Lvova, V. See Balaschova, O. N., and Rubinstein, D. L.
- Lyalikov, S. See under Ljalikov.
- Lyall, A., and Innes, J. A., diabetes mellitus and the pituitary gland, A., 515.
- Lydén, R., behaviour of thallium halides in iodine solutions, A., 446. Behaviour of chromic oxide towards alkali halogenate solutions. I. Reaction system chromic oxide-bromate, A., 834.
- Lykins, J. D. See Olin, H. L.
- Lykov, A. I., relation between temperature, conductivity, and moisture content of ground matter, with reference to the drying process, B., 22. Temperature of material and rate of evaporation of moisture in drying processes, B., 433. Velocity and temperature curves of the drying process, B., 529. Drying of peat, B., 611. Temperature of chrome leather during sorption of water vapour, B., 739.
- Lyman, K. E., Miller, K., and Borg-Warner Corp., oil-filter medium, (P.), B., 218.
- Lyman, T., transparency of air between 1100 and 1300 Å., A., 1184.
- Lynch, G. R., Slater, R. H., and Osler, T. G., determination of traces of lead in biological materials, with special reference to bone, A., 247.
- Lynch, K. M. See Coulson, E. J.
- Lynn, A. M. See Western Electric Co.
- Lynn, E. V., and Fischer, L., leaf oils of Washington conifers. VII. *Juniperus occidentalis*, Hook, B., 1068.
- See also Jorgensen, P. S., and Richards, L. W.
- Lynn, G. See Pittsburgh Plate Glass Co.
- Lyon, A. J., improving [copper]-aluminium alloy, (P.), B., 1000.
- Lyon, C. E., and Windecker, C. N., disposal of sewage, (P.), B., 176.
- Lyon, E. W. See Tisdale, E. S.
- Lyon, K. C. See Chesters, J. H.
- Lyon, R. C. See Du Pont de Nemours & Co., E. I.
- Lyon, T. L., and Bizzell, J. A., comparison of legumes with respect to nitrogen accretion, B., 166.
- Lyon-Caen, L., and Jude, A., chronic poisoning by manganese dioxide, A., 399.
- Lyons, E. H., jun., and Dickinson, R. G., photo-oxidation of liquid carbon tetrachloride, A., 590.
- Lyons, J., influence of physical and mechanical treatment on firmness of butter, B., 921.
- and O'Shea, M., influence of the stage of lactation on fat determination by the Gerber method, A., 106.
- Lyons, R. E. See Fletcher, W. A., and Miller, F. M.
- Lyot, B., monochromatic green filter, A., 598.
- Lyse, I., effect of brand and type of cement on strength and durability of concrete, B., 547.
- Lyuksemburg, M. S., and Knyazev, I. I., prolonged storage of sheep skins, B., 241.

M.

- M. & V. Tank Co. See McMurray, W. G.
- Ma, C. M. See Chi, Y. F., and Chuang, C. K.
- Ma, T. S. See Sah, P. P. T.
- Maas, C. F. H., prevention of danger in the paint [manufacturing] and painting industries, B., 959.
- Verwey, M. G., Mees, A. M., and De Bruyn, C. A. L., [Dutch] paint specifications and tests, B., 464.
- Maas, H. See Fischbeck, K.
- Maas, N. A., paint-making machinery, B., 509.
- Maas & Waldstein Co. See Klinkenstein, G.
- Maass, E., and Dufek, V., influence of high-frequency current on corrosion of iron, B., 27.
- Maass, H. See Mehlitz, A.
- Maass, K. See Sturm, A.
- Maass, O. See Argue, G. H., Brown, R. S., Edwards, J., Filby, E., Johnston, H. W., Morehouse, F. R., Stewart, W. W., and Van Cleave, A. B.
- Maass, W. See Koller, G.
- Maatschappij tot Exploitatie van "ten Bosch Oetooien N.V." See under N.V. Maats. tot Exploit. van "ten Bosch Oetooien."
- Mabey, H. E. See Brit. Resin Products.
- McAdam, D. J., jun., and Clyne, R. W., influence of chemically and mechanically formed notches on fatigue of metals, B., 191.
- MacAdams, J. E., heat-transfer apparatus, (P.), B., 83.
- McAdams, W. H. See Universal Oil Products Co.
- McAfee, A. M., and Gulf Refining Co., low-boiling petroleum distillates, (P.), B., 838.
- McAleer Manufacturing Co. See Patterson, P. A.
- McAlevy, A. See Milas, N. A.
- McAlister, D. F. See Duggar, B. M.
- McAlister, E. D., Christiansen light filter, A., 722.
- See also Flint, L. H.
- Macallum, A. B., insulin-inhibiting agency in the duodenum, A., 1172.
- See also Laughton, N. B.
- Macallum, A. D. See Du Pont de Nemours & Co., E. I.
- McAlpine, K. B., and Smyth, C. P., dipole moments of mono-substituted benzenes in vapour state, A., 283.
- See also Smyth, C. P.
- McAnally, R. A., and Maclean, I. S., synthesis of reserve carbohydrate by yeast. I. Synthesis from glucose and maltose and influence of phosphate thereon. II. Effect of fluoride, A., 1164, 1281.
- McAnally, S. G., lime-gypsum plaster, (P.), B., 548.
- MacAndrews & Forbes Co. See Houseman, P. A., and Treichel, J. B.
- Maara, T., composition of raspberries, A., 1432.
- McArdle, T. E. See Schulze, J. E.
- Macarovič, C. G. See Spacu, G.
- McArthur, M. See Clark, R. H.
- McBain, J. W., hysteresis in hydration and dehydration of gels, A., 701. What is a colloid? A., 932. Association in dissociation of simple straight-chain sulphonic acids in water. IV. Comparison of results, and so-called "Hammarsten effects," A., 1460.
- and Barker, (Miss) M. M., activity of soap solutions at 90°, A., 302.
- and Betz, M. D., association in dissociation of simple straight-chain sulphonic acids in water. I. Conductivity. II. F.p. III. E.m.f., A., 1460.
- Bull, H. I., and Staddon, L. S., hydration of crystalline fibres of soap curd, A., 163.
- and Dawson, C. R., diffusion of potassium chloride in aqueous solution, A., 295.
- and Foster, J. E., magnitude of surface conductivity, A., 705.
- Grant, E. M., and Smith, L. E., viscosity of nitrocellulose in various solvents and mixtures, A., 291.
- and O'Sullivan, C. M., development of an air-driven ultracentrifuge, A., 724.
- McBain, (Mrs.) M. E. L., relation of electrokinetic and electrolytic movement, as illustrated by transport of electricity through soap curds, A., 299.
- McBee, E. T. See Hass, H. B.
- Macbeth, A. K., and Price, J. R., action of titanous chloride on nitrophenylhydrazones; *p*-nitro- and 2:4-dinitrophenylhydrazones, A., 482.
- Price, J. R., and Winzor, F. L., colouring matters of *Drosera Whittakeri*. I. Absorption spectra and colour reactions of hydroxynaphthoquinones, A., 623.
- and Winzor, F. L., colouring matters of *Drosera Whittakeri*. II., A., 623.
- See also Beck, A. B.

- Macbeth, C., and Rubber Producers' Res. Assoc., products in which rubber is associated with metal, (P.), B., 1148.
- Macbeth-Evans Glass Co. See Blau, H. H.
- McBrian, R., mountain waters impose unusual problems [in boiler-water treatment], B., 209.
- McBride, D. L. See Herty, C. H., jun.
- McBride, G. A., and Western Cartridge Co., propellant powders, (P.), B., 704.
- McBride, R. S., processing coal in the Knowles coke oven, B., 753. Automatic controls for operating a solvent-recovery plant, B., 1128.
- MacBride, W. B. See Havenhill, R. S.
- McBurney, C. H., Bollen, W. B., and Williams, R. J., pantothenic acid and the nodule bacteria-legume symbiosis, A., 1167.
- McBurney, J. E., and Owens-Illinois Glass Co., glass furnace, (P.), B., 804.
- McCabe, W. L. See Ting, H. H.
- McCaffery, R. S., Bessemer steel, (P.), B., 906.
- McCaig, M. See Kornfeld, G.
- McCaleb, A. G. See Allen, H. E.
- McCalla, A. G., effect of potassium supply on composition and quality of wheat, B., 244.
- and Newton, R., effect of frost on wheat at progressive stages of maturity. II. Composition and biochemical properties of grain and flour, A., 1288.
- and Rose, R. C., fractionation of gluten dispersed in sodium salicylate solution, A., 769.
- See also Aamodt, O. S., and Larmour, R. K.
- McCallan, S. E. A., and Wilcoxon, F., fungicidal action and periodic system of the elements, B., 199.
- See also Wilcoxon, F.
- McCallum, W. J. See Spence, D.
- McCammon, R. B. See Kramer, M. M., and Pittman, M. S.
- McCance, R. A., effect of sudden severe anoxemia on function of the human kidney, A., 1271.
- See also Watchorn, E., and Widdowson, E. M.
- McCandless, E. L. See Mehl, R. F.
- McCandless, G. F. See Robertson, James A.
- McCann, D. C. See Waldbauer, L.
- McCann, S. W., history, development, and manufacture of glass-lined steel equipment for the brewing and kindred industries, B., 1048.
- McCann, W. S. See Hurtado, A.
- McCarthy, E. F. See Barcroft, J.
- McCarthy, J. D. See Sweet, A. T.
- McCartney, W. See Browning, C. H.
- McCarty, B. Y. See Texas Co.
- McCaughy, W. J., Lee, H. C., and Non-Metallic Minerals, a refractory synthetic magnesia product, (P.), B., 993.
- McCauley, W. E. See Flint, W. P.
- McCay, C. M., and Maynard, L. A., effect of ingested cod-liver oil, shark-liver oil, and salmon oil on composition of blood and milk of lactating cows, A., 773.
- See also Madsen, L. L.
- McCay, L. W., weighing of molybdenum as silver molybdate, A., 187.
- McCay, M. S., intensity of the electrodeless hydrogen spectrum as conditioned by pressure and discharge-tube dimensions, A., 799.
- Maccchia, E., indole. I. Behaviour when introduced into blood and its route of elimination, A., 653.
- McClanahan, H. H., jun., and Amberson, W. R., hydrogen carbonate elimination through salivary glands under nervous and chemical stimulation, A., 512.
- McCleary, F. E., Babo, K. C., Rayner, H., and Chrysler Corp., hardening of cast [steel] articles, (P.), B., 595.
- McCleary, R. F., and Degering, F. F., preparation of zinc ethyl, A., 333.
- and Fernelius, W. C., diphenyl- and di-o-tolyl-guanidinium polyselenides, A., 228.
- McCleery, W. L., dilution *versus* heating in preparing low-grade massecuite for purging; viscosity of factory molasses, B., 692.
- McClelland, E. W. See Barry, W. J.
- McClelland, T. B., cane syrup manufacture, B., 1063.
- McClendon, J. F., graphic representation of ionic equilibria in blood-serum, A., 1143.
- and Holdridge, C. E., iodine in cabbage, A., 553.
- See also Cavett, J. W.
- McCleskey, C. S. See Reynolds, H.
- McCloskey, G. E. See Barrett Co.
- McCloskey, K. E., and France, W. G., ultramicroscopical study of irradiated drying oils, B., 597.
- McCluer, W. B., and Fenske, M. R., evaluating viscosity-temperature characteristics of [lubricating] oils, B., 54.
- Viscosity of petroleum products; conversion of kinematic viscosity into universal Saybolt seconds, B., 613.
- McClugage, H. B. See Strang, J. M.
- McClung, L. S., anaerobic bacteria. III. Culture of thermophilic anaerobes. IV. Taxonomy of cultures of a thermophilic species causing "swells" of canned foods, B., 476.
- See also Peterson, W. H.
- McClure, F. J., Voris, L., and Forbes, E. B., utilisation of energy-producing nutrient and protein as affected by individual nutrient deficiencies. II. Effects of vitamin-B deficiency, A., 261.
- McClurkin, T. See Barcroft, J.
- McCluskey, S. B., recovery of sulphur from sulphide ores, (P.), B., 148.
- Treatment of sulphur dioxide-containing gases, (P.), B., 307.
- Reduction of sulphur dioxide to elemental sulphur, (P.), B., 307.
- Macco, G. D., Hagedorn-Jensen method for [determining] blood-sugar, A., 1392.
- McCollum, E. V. See Itter, S., and Kehar, N. D.
- McColm, E. M. See Gibbons, W. A.
- MacComb, W. S. See Quimby, E. H.
- McCombie, H., and Purdie, D., $\beta\beta'\beta''$ -trichlorotriethylamine, A., 1228.
- McCombs, M. F., and Niagara Alkali Co., apparatus for bleaching pulp, (P.), B., 97.
- McConnachie, W., re-oxidation of crude iron [in the blast furnace] and its ultimate reduction, B., 409.
- McConnaughay, K. E., and Pre Cote Corp., [aqueous] bituminous emulsion, (P.), B., 1083.
- McConnell, C. W., vacuum regulator, A., 321.
- McConnell, E. B. See Standard Oil Co.
- McConnell, F. J. See Wildon, B. H.
- McCoord, A. B. See Chesney, J.
- McCorkle, W. H., effect of a magnetic field on polarisation of impact radiation, A., 1291.
- McCormick, W. F. See Horton, P. M.
- McCormick & Co., Inc. See Badertscher, A. E.
- McCowan, W. See Internat. Latex Processes.
- McCowen, E. W. See Imperial Chem. Industries.
- McCowen, J. L. See Imperial Chem. Industries.
- McCown, M., clarified cider, B., 1017.
- McCoy, E. See Langlykke, A. F.
- McCoy, H. N., separation of europium from other rare-earths, A., 1333.
- McCrabbe, H. W. M., and Internat. Vitacrine Laboratory Corp., treatment of perishable [alimentary] materials for fixation, (P.), B., 1163.
- McCracken, E. C., electrical method of determining specific heats, A., 1340.
- McCrae, J., pH determination with two-colour indicators by a dilution method, A., 1336.
- McCraven, B. N., and New Jersey Zinc Co., zinc oxide, (P.), B., 100.
- McCrea, F. D., Marion, D. F., Tyson, W. W., and Kavanagh, W. P., effect of alcohol on spleen volume, A., 1412.
- McCready, D. W., drying of pulp and paper. II. Effects of principal variables on rate of air-drying. III. Mechanism of drying of pulp slabs on heated surfaces, B., 1088.
- McCready, W. K. See Mathieson Alkali Works.
- McCreary, E. J., and Smith, H. Gregg, determination of reducing sugars in bacteriological media, A., 257.
- McCreary, H. J., and Richardson, R. G., electrical generator, (P.), B., 414.
- McCrosson, J. T., canning of foodstuffs, (P.), B., 286.
- McCruden, D. J., jun., accurate blending of colours in oils and paints, (P.), B., 366.
- McCubbin, J. W. See Munro, L. A.
- McCulloch, A., coal researches: their significance to the coal industry, B., 1122.
- McDermott, F. A. See Du Pont de Nemours & Co., E. I.
- McDonald, A. C. See McDonald, C. H.
- MacDonald, C. A. See Gen. Chem. Co.
- MacDonald, C. H., and McDonald, A. C., rate of oxygen consumption of the isolated terrapin heart when perfused with various solutions, A., 1150.
- MacDonald, C. L. See McDowall, F. H.
- MacDonald, D. F., recovery of petroleum products contained in oil shales, lignites, high-volatile coals, tar sands, bituminous sandstones, limestones, and other petroleum-bearing material, (P.), B., 712.
- McDonald, E. See Allen, A. J., and Franklin, R.
- Macdonald, F. G., and Adam, H. R., addition of lead salts in cyaniding gold ores, B., 807.
- McDonald, Francis G. See Bills, C. E.
- McDonald, I. W. See Wardlaw, H. S. H.
- MacDonald, J. See Blanchard, K. C.
- McDonald, J. A., relationship between nutrient supply and chemical composition of the cacao tree, B., 73.
- See also Hardy, F.
- Macdonald, J. M. See Clemo, G. R.
- Macdonald, J. Y., partition of tri- and tetramethylglucoses between chloroform and water, A., 695.
- McDonald, Mert C., refining of petroleum crude oil, (P.), B., 215.
- McDonald, Milton C. See Bell, K. E.
- Macdonald, P. A., and Campbell, E. M., measurement of radium emanation implants, A., 1217.

- McDonald, R. D. See Steacie, E. W. R.
 McDonald, T. A., [control of] sow thistle and Canada thistle, B., 118.
 McDonnell, T. F. See Gardner, J. H.
 MacDonough, J. V. See Walsh, J. F.
 MacDougall, D. P. See Giaque, W. F.
 MacDougall, E. J., effect of blood-sugar concentration on rate of absorption of sugar from the intestine, A., 1273.
 Verzář, F., Erlenmeyer, H., and Gaertner, H., heavy water in the animal body, A., 243.
 MacDougall, F. H., diffusion of electrolytes in silica gel, A., 32.
 MacDougall, G., and Davies, C. W., solubility of barium iodate in salt solutions, A., 1457.
 MacDougall, J. See Hulme, H. R.
 MacDougall, R. S., ox warble flies, B., 118.
 McDowell, F. H., dairy factory by-products and drainage wastes, B., 1021.
 and MacDonald, C. L., determination of salt in butter, B., 1066.
 MacDowell, L. G. See Adelson, D. E.
 McDowell, M. L. See Pearce, J. N.
 McDowell, S. J., development of proposed standards and tests for plaster of Paris, B., 852.
 Macé, A. See Rabaté, S. G.
 McElroy, W. S., and Herron, W. F., therapeutic preparations of glands, tissue, liver, etc., (P.), B., 829.
 McElroy, K. P., and Permutit Co., base-exchange silicates, (P.), B., 900.
 McElroy, L. W. See Sinclair, R. D.
 McElvain, S. M., 5:5-diphenylbarbituric acid, A., 1132.
 See also Cox, R. F. B., Meincke, E. R., Singer, A. W., and Walter, L. A.
 McElwee, E. W., nitrate levels of soil as influenced by different ratios of nitrate and organic materials, B., 421.
 McEver, T. G. See Poe, C. F.
 McEwen, A. D., [report of] veterinary department, B., 1014.
 McEwen, S., Loeffler system of steam production, B., 209.
 Macey, H. H., promotion of drying of clay by coagulating effect of acid, B., 1043.
 McFarlan, R. L., rotation of the plane of polarisation of a beam of X-rays, A., 1439.
 Macfarlane, A., and Hartley, (Sir) H., standard electrode potential of lithium in methyl alcohol, A., 1324.
 See also Gibson, G. E.
 MacFarlane, A. S., ultracentrifugal investigation of serum-proteins, A., 508. Behaviour of pathological sera in the ultracentrifuge, A., 879. Ultracentrifugal analysis of normal and pathological serum fractions, A., 879. Behaviour of urinary proteins in the ultracentrifuge, A., 885.
 Macfarlane, J. M., [origin of] natural oil, A., 191.
 MacFayden, D. A., properties of the causative agent of a chicken tumour. IX. Effects of aqueous extracts of chicken tumour on yeast-nucleic acid, A., 382.
 McGavack, J., properties of latex-insulated wire, B., 954.
 and Naugatuck Chem. Co., coating of fabrics, (P.), B., 267. Rubber articles [from latex], (P.), B., 322. Treatment of rubber latex, (P.), B., 1154.
 Tefft, R. F., and Naugatuck Chem. Co., treatment [stabilisation] of [rubber] latex, (P.), B., 1006.
 McGavock, A. M. See Wiebe, A. H.
 MacGee, A. E., White, W. C. O., and Klinefelter, T. A., properties of Ohio red-firing clays, B., 630.
 McGee, F. R., furnace regenerator, (P.), B., 1025.
 McGeoch, (Miss) S. N., and Stevens, T. S., abnormal reaction of an α -bromoketone, A., 1241.
 McGeorge, W. T., determination of phosphate availability in calcareous soils by electrodialysis, B., 72. Manuring of soils in dry climates. II. United States of America, B., 515. Relation of potential alkalinity to availability of phosphate in calcareous soils, B., 820.
 Buchrer, T. F., and Breazeale, J. F., phosphate availability in calcareous soils: a function of carbon dioxide [content] and p_{H_2} , B., 865.
 McGill, R. See Du Pont de Nemours & Co., B. I.
 McGill, W. J. See Standard Oil Co.
 MacGillivray, C. H., crystal structure of some amines of the type $M(NH_2)_2Cl_2$, A., 920.
 See also Bijvoet, J. M.
 MacGillivray, D., deuterium. I., A., 1185.
 MacGillivray, J. C. See Fawcett, Preston & Co.
 MacGillivray, J. H., effect of heat on red and yellow tomato pigments, B., 250.
 McGlashan, J., absolute alcohol, (P.), B., 42.
 MacGlashan, W. F., aggregates for concrete or other cementitious masses, (P.), B., 675.
 McGlumphy, J. H. See Hixon, R. M.
 McGookin, A., orientation problems. I. Effect of nitro-groups in Schiff's bases, A., 76.
 See also Jennings, W. P.
 McGrath, J. See Imperial Chem. Industries.
 McGregor, A. See Roger, R.
 McGregor, A. G., rotary furnaces, (P.), B., 313.
 McGregor, A. M. See Lightfoot, B.
 McGregor, E. A., sulphur dust for citrus thrips and certain scales, B., 246.
 McGregor, G. H. See Earl, J. C.
 McGregor, George H. See Morden, C. W.
 MacGregor, J. C. See Scott & Co., Ltd., E.
 MacGrew, F. C. See Avery, S.
 McGuire, G. See Falk, K. G.
 Mach, F., and Lederle, P., luminescence of [fertiliser] phosphates, B., 165.
 Mach, R. S., gastric secretion and hypochloremia, A., 1267.
 Machado, J. E., and Sonol, J., preparation and preservation of hypochlorite solutions for medicinal use, B., 252.
 McHaffie, I. R., liquefaction of sulphur dioxide from dilute gas mixtures, B., 268.
 See also Grasselli Chem. Co., and Imperial Chem. Industries.
 McHargue, J. S., iodine content of maize produced in nineteen eastern Kentucky counties, B., 1018.
 Young, D. W., and Calfee, R. K., effect of fertiliser materials on iodine content of important foods, B., 1061.
 Machatschki, F., crystal structure of aluminium arsenate $AlAsO_4$; isomorphism of Si and As in crystals, A., 1060.
 See also Bubeck, W.
 Maché, A., determination of ozone, A., 836.
 Macheboeuf, M. A., and Bonnefoi, A., antigenic fixatives of tubercle bacilli. II. Purification and fractionation of lipins with hapten activity from heat-killed bacilli, A., 1395, 1542.
 and Cassagne, H., chemistry of the diphtheria bacillus; fractional extraction of lipins; separation of the hapten fraction; presence of soap in the bacterial cell, A., 1028.
 and Dieryck, J., chemistry of tubercle bacilli; presence in the "smooth" variety of a precipitation hapten that does not exist in the "rough" variety, A., 1169.
 Dieryck, J., and Stoop, R., tubercle bacillus. II. Fractional extraction of lipins from fresh unheated bacilli, A., 407.
 and Lévy, Georgette [with Chambaz, M.], antigenic fixatives of tubercle bacilli. I. In lipin-containing extracts of heat-killed bacilli, A., 256.
 Lévy, Georgette, and Faure, M., chemical nature of the lipid hapten from tubercle bacilli killed by heat, A., 899. Antigenic fixatives of tubercle bacilli. III. Separation of the hapten-active phosphatides from the nitrogenous impurities, A., 1542.
 See also Basset, J.
 Machek, G., action of aromatic hydroxy-sulphonic acids on hippuric acid. I., A., 970. Action of aromatic sulphonic and hydroxysulphonic acids on α - and β -amino-acids. II., A., 1486.
 McHenry, E. W., and Gavin, G., histaminase. IV. Purification. V. Source of ammonia formed in the histamine-histaminase reaction, A., 659.
 and Graham, M. L., determination of ascorbic acid by titration, A., 903, 1287.
 Machida, I. See Nagaoka, Hantaro.
 Machle, W., and Kitzmiller, K., effects of inhalation of hydrogen fluoride. II. Response following exposure to low concentration, A., 1534.
 and Scott, E. W., effects of inhalation of hydrogen fluoride. III. Fluorine storage following exposure to sublethal concentrations, A., 1534.
 Macblett, R. R., and Rainbow Light, Inc., low-voltage electric-discharge tube, (P.), B., 363.
 Machlis, S., and Blanchard, K. C., β -amino- α -diphenylpropyl alcohol, A., 486.
 Machold, K., urine infection and detection of nitrite in urine, A., 513.
 Macht, D. I., and Bryan, H. F., synergistic action of milk- and muscle-oxidases, A., 1023.
 and Dunning, F., pharmacology and therapeutics of "bromsalizol" (bromosaligenin), A., 895.
 Macht, M. L., and Duplate Corp., composite glass, (P.), B., 23.
 Machu, W., aluminium and its alloys in modern practice, B., 273. Is the hardening of cement mortars a chemical or an electrostatic phenomenon? B., 497. Corrosion of iron, B., 1145.
 See also Müller, W. J.
 McHugh, J. W., coating and decorating tinplate, B., 32.
 McHugh, S. A. See Landis, Q.

- Machwirth, W., comparison of organic manures in relation to maintenance and improvement of soil productivity: stall manure, artificial manure, straw- and green-manuring, B., 866.
- McIlhenny, J. S. See Hitchcock, L. B.
- McIlvaine, T. C. See Garber, R. J.
- McIlwain, H. See Clemo, G. R.
- Macindoe, S. L. See Wenholz, H.
- MacInnes, D. A., and Belcher, D., thermodynamic ionisation constants of carbonic acid at 38° from c.m.f. measurements, A., 1321.
- See Brown, A. S., Longworth, L. G., and Shedlovsky, T.
- MacIntire, W. H., [phosphate] fertilisers, (P.), B., 517.
- and Hardin, L. J., modified technique for determination of citrate-insoluble P_2O_5 [in fertilisers], B., 741.
- Jones, R. M., and Hardin, L. J., comparison of filtration by gravity and by suction in washing to remove water-soluble P_2O_5 from analytical charges, B., 723.
- and Shaw, W. M., transition of citrate-soluble phosphate into citrate-insoluble form in mixtures with limestone and with dolomite, B., 165.
- Shuey, G. A., and Knoxville Glove Co., conversion of scrap leather into a fertiliser component, (P.), B., 371.
- See also Shaw, W. M.
- McIntosh, J. F., serum-iron in anaemia, A., 381.
- McIntyre, A. K. See Wardlaw, H. S. H.
- McIntyre, A. R., Sievers, R. F., and Elias, H. F., effects of pituitrin, pitressin, and pitocin on the copper-reducing substances in the serum and urine of dogs, A., 1424.
- McIntyre, G. See Standard Oil Development Co.
- McIntyre, G. H. See Ebright, H. E.
- McIntyre, H. K. See Cox, G. C.
- McIntyre, J. W. See Kress, O.
- Maciuc, G., after-effect of a glow discharge in lowering the striking potential in nitrogen, hydrogen, and air, A., 907.
- Cause of lowering of striking potential at low pressures, A., 907.
- Maciuc, C., seasonal variations of fats in organisms of *Pyrrhocoris apterus*, A., 882.
- McJunkin, F. A., Tweedy, W. R., and Menck, W. J., necrosis of the myocardium induced by orthophosphates, A., 658.
- Mack, E., jun., structure of rubber and mechanism of elastic stretching, B., 196.
- Mack, G. F. See Quick, J. D.
- Mack, G. L. See Harman, S. W.
- Mack, J. E., and Fromer, M., new energy levels in Au II, Hg III, Tl IV, Pb V, and Bi VI, A., 1292.
- See also Whitelaw, N. G.
- Mack, L., and Smith, Erna A., methylene-blue in illuminating-gas poisoning, A., 530.
- Mack, M. J., controlling physical properties of high-solids [ice-cream] mixes, B., 475.
- and Foksett, C. R., plastic cream; a new dairy product, B., 250.
- Mackay, C. A. See Alty, T.
- McKay, C. M. [with Ku, C. C., Woodward, J. C., and Sehgal, B. S.], cellulose in diet of rats and mice, A., 240.
- McKay, C. W. See Texas Co.
- McKay, E., salt-tolerance of *Ruppia maritima* in lakes of high magnesium sulphate content, A., 1547.
- MacKay, E. M., and Barnes, R. H., effect of feeding desiccated thymus on growth, A., 1404.
- and Rytand, D. A., significance of the phenolsulphonaphthalein test of renal function, A., 518.
- McKay, F. S., effects of fluorine in water on teeth, A., 399.
- McKay, H. A. C., and Higman, B., effect of pressure on eutectic mixtures, A., 447.
- See also Craxford, S. R.
- Mackay, R., and Buchanan, J. C. R., arsenical poisoning associated with larvicidal treatment of water with Paris-green, B., 528.
- McKay, R. F. See Internat. Latex Processes.
- McKay, R. J., corrosion in liquids, B., 1048.
- McKay, R. W., iodine value of wool, B., 488.
- McKay, R. W. (Toronto), dielectric constant of electrolytes, A., 699.
- Mackay, W. B. See Roger, R.
- McKee, J. A., Scott, R. S., and McKee, R. A., [bakelite containers for] dry primary batteries, (P.), B., 158.
- McKee, R. A. See McKee, J. A., and Sandin, R. B.
- McKee, R. H., recovery of organic constituents from black liquor, (P.), B., 266.
- Recovery of organic constituents present in black liquor in making paper by the caustic soda process, (P.), B., 669.
- and Faber, H. B., phenylstearic acid, (P.), B., 762.
- and Gerapostolou, B. G., electrolytic reduction of nitro-compounds in concentrated aqueous salt solutions, B., 984.
- McKeefe, E. P. See Bradley, L.
- McKeehan, L. W., and Shih, J. W., magnetometer for crystal ferromagnetism and its application to iron-cobalt alloy crystals, A., 1341.
- McKellar, A. See Bradley, C. A., jun., and Jenkins, F. A.
- McKenna, H. H., and Wonderful Development Co., classification of solids, (P.), B., 481.
- McKenzie, A., and Christie, E. W., activation of *r*-tartaric acid by optically active malic acid, A., 731.
- Asymmetric syntheses. XII. Asymmetric synthesis of phenyl-*p*-tolylglycollic and *p*-tolylmethylglycollic acids, A., 975.
- and Stewart, P. A., optical activity in the indole group, A., 356.
- See also Christie, E. W.
- McKenzie, H. J. See Wade, J. B.
- McKenzie, J. P. See Suter, C. M.
- Mackenzie, K., glycogen metabolism in the rat after partial hepatectomy, A., 111.
- McKeown, A. See Griffith, R. O.
- McKeown, J. See Du Pont de Nemours & Co., E. I.
- McKesson, C. L., Thompson, L. G., Buckley, W. D., and Amer. Bitumuls Co., bituminous emulsion, (P.), B., 794.
- McKhann, C. F. See Gamble, J. L.
- McKibbin, R. R. See Atkinson, H. J., and Wrenshall, C. L.
- McKillop, J., materials of construction for chemical engineering, B., 433.
- Mackin, J. H., martic overthrust and the age of the Glenarm series in S.E. Pennsylvania, A., 1344.
- McKinley, J. M. See Nat. Aluminate Corp.
- McKinney, D. S. See Hecht, M.
- Mackinney, G., carotenes from roots and leaves at various stages of development, A., 422.
- Development of the chlorophyll and carotenoid pigments in barley seedlings, A., 1290.
- Leaf carotenes, A., 1434.
- See also Miller, E. S.
- McKinney, J. See Loomis, J. H.
- McKinney, P. V., reduction of platinum oxide by carbon monoxide and catalysis of reaction between carbon monoxide and oxygen, A., 175.
- McKinney, R. S., Carter, J. L., and Jamieson, G. S., [determination of] oil content of soya beans, B., 276.
- and Jamieson, G. S., composition of American tung oil, B., 639.
- See also Jamieson, G. S.
- McKinnis, R. B., and Continental Can Co., flaked-cereal beverage product, (P.), B., 173.
- Spice product, (P.), B., 173.
- See also Continental Can Co.
- McKinnon, J. H., and Fractional Retort, Inc., fractional retort; [ore-roasting furnace], (P.), B., 679.
- McKinnon, L. R., and Allen, F. W., mercury pump for making and supplying a uniform mixture of gases, A., 599.
- Mackintosh, J. See Cranfield, H. T., and Golding, J.
- Mackney, A. W. See Earl, J. C.
- McKnight, E. T., occurrence of enargite and wulfenite in ore deposits of Northern Arkansas, A., 469.
- McLachlan, T., analysis of turpentine liniment, B., 1117.
- and Mathews, D. M., determination of elemental sulphur [in ointment], B., 1117.
- MacLachlan, T. K. See Cuthbertson, D. P.
- MacLagan, J. C. M. See Greenwood & Batley, Ltd.
- MacLagan, N. F., influence of acid-base equilibrium on gastric secretion, A., 1005.
- See also Lander, F. P. L.
- MacLaren, F. H. See Standard Oil Co.
- McLaughlin, G. D., Cameron, D. H., and Adams, R. S., reaction between hide substance and basic chromium [salt] solutions, B., 323.
- McLaughlin, H. L. See Skow, R. E., and McLaughlin, W. L.
- McLaughlin, J. W. See Sniffin, J. G.
- McLaughlin, W. L., and McLaughlin, H. L., Ballou, V., and Nat. Pure Water Corp., distilled water, (P.), B., 608.
- MacLaurin, I. M. See MacLaurin, R.
- MacLaurin, J., decalcomania paper, (P.), B., 97.
- MacLaurin, R., Dempster, Ltd., R. & J., MacLaurin, I. M., and Blairs, Ltd., apparatus for scrubbing gas, (P.), B., 85.
- MacLaurin, W. W., and Old Colony Trust Co., adhesive, (P.), B., 564.
- McLean, A., solvent action. IX. Rotatory powers of *l*-menthyl esters of *m*-nitro- and 3,5-dinitrobenzoic acids in relation to solvent, concentration, temperature, and wave-length of light, A., 443.
- McLean, D., separator or classifier for ore pulp, etc., (P.), B., 531.
- McLean, D. L., and Best, C. H., choline and liver-fat, A., 524.
- See also Best, C. H.
- McLean, F. C., construction of a Cartesian nomogram for the law of mass action, A., 1219.

- McLean, F. C., and Hastings, A. B., state of calcium in fluids of the body. I. Conditions affecting ionisation of calcium, A., 374.
See also Compere, E. L.
- MacLean, G., and Turbo-Mixer Corp., fluid [liquid with liquid] treating apparatus, (P.), B., 755. Treatment of liquids with gases, (P.), B., 755.
- McLellan, I. S. See Jones, R. O., and McAnally, R. A.
- McLean, J. H. See Keffler, L.
- McLean, R. C., substitution staining with free dye-acids and -bases, A., 268.
- McLellan, A., separator, (P.), B., 772.
- McLennan, J. C., Burton, E. F., and Pitt, A., slowing down of neutrons by protons, A., 802.
- Grimmett, L. G., and Read, J., artificial radioactivity produced by neutrons, A., 276, 678.
- and Smithells, C. J., new alloy suitable for use in radium beam therapy, A., 723.
- Macleod, D. B., specific heat of a liquid and its vapour and its application to the heat of reaction in liquid mixtures, A., 704.
- and Wilson, F. J., heats of reaction and viscosities of ether-chloroform mixtures, A., 439.
- MacLeod, D. J., and Howatt, J. L., soil treatment in control of soil-borne diseases of potatoes, B., 74.
- MacLeod, F. L., Armstrong, M. R., Heap, M. E., and Tolbert, L. A., vitamin-A content of five varieties of sweet potato, B., 652.
- McMahan, S., pulveriser, (P.), B., 786.
- McMahon, E. See Carroll, J.
- McMahon, P. R. See Elphick, B. L.
- Macmahon, P. S., and Srivastava, L. N., cryoscopic measurements of Indian milk, A., 1005.
- McMahon, W. See Waterman, R. E.
- Macmaster, A. See Williams (Hounslow), Ltd.
- McMaster, L., and Bruner, W. M., synthesis of 8-hydroxy-5-benzylquinoline; antiseptic activity of its sulphate, A., 1379.
- McMeekin, T. L., Cohn, E. J., and Wear, J. H., physical chemistry of amino-acids, peptides, and related substances. III. Solubility of derivatives of amino-acids in alcohol-water mixtures, A., 695.
See also Cohn, E. J.
- Macmillan, D. See Glatfield, J. W. E.
- McMillan, E., isotopic constitution of lithium in the sun, A., 141. γ -Rays accompanying artificial nuclear disintegrations, A., 141. Hyperfine structure in the solar spectrum, A., 1292.
- and Lawrence, E. O., transmutations of aluminium by deuterons, A., 559.
- and Livingston, M. S., artificial radioactivity produced by the deuteron bombardment of nitrogen, A., 559.
See also Grace, N. S., and Lawrence, E. O.
- McMillen, J. H., elastic electron scattering in potassium, A., 139.
- McMinis, A. S. See Manville, I. A.
- McMullan, O. W., physical properties of case-hardened steels, B., 904.
- McMullen, C., Turner, A. A., and Easter, G. J., effect of variations in the alumina-silica ratio in fused refractory materials on resistance to metal oxides, B., 356.
- MacMullin, R. B., and Mathieson Alkali Works, magnesium chloride, (P.), B., 306. Concentration of sodium hydroxide [solution], (P.), B., 899.
- and Weber, M., jun., determination of efficiency of continuous mixers and reactors, B., 609.
See also Cunningham, G. L., and Mathieson Alkali Works.
- McMurray, R. L., essential oil of *Achillea millefolium*, Linn., B., 429.
See also Norin, G.
- McMurray, W. G., and M. & V. Tank Co., high-pressure separator, (P.), B., 210.
- McMurtrey, J. E., jun., boron deficiency in tobacco under field conditions, B., 647.
- McNabb, P. E., and Schwartz, S. C., atebirin in treatment of malaria in the Philippine Islands, A., 1149.
- McNabney, R., Moulton, W., and Beuschlein, W. L., dielectric constants of air and hydrogen at high pressures, A., 808.
- McNair, J. B., evolutionary status of plant families in relation to chemical properties, A., 132.
- McNally, E., passage of ovoglobins through the shell membrane, A., 389.
- McNally, J. G. See Eastman Kodak Co.
- McNamara, T. L., gum-stabilities of gasoline, B., 1031.
- McNamee, P. D., determination of chloro-amine in water supplies, B., 1071.
- McNary, R. R. See Rothmund, P.
- McNaught, (Mrs.) B. A. See under Phoenix Supply Co.
- Macnaughtan, D. J., adherent metal coatings [tin-plating] on iron, steel, or other metal, (P.), B., 157.
- Clarke, S. G., and Prytherch, J. C., determination of porosity of tin coatings on steel, B., 457.
- and Hothersall, A. W., determination of structure of electrodeposits by metallurgical methods, B., 998.
See also Campbell, (Sir) John.
- McNeal, D. R. See Andale Co., and Jenkins, J. M.
- McNeil, C., sugar-cane and similar mills, (P.), B., 1112.
- McNeill, D., formation of paper on the Fourdrinier wire. II., B., 222.
- McNicholas, H. J., colour and spectral transmission of vegetable oils, B., 912.
- McNicolas, H. J., equipment for measuring reflective and transmissive properties of diffusing media, B., 1.
- MacNider, W. de B., resistance of fixed tissue cells to toxic action of certain chemical substances, A., 1159.
- McNulty, G. M. See Raiford, L. C.
- MacNutt, A. D., and Certain-Teed Products Corp., roofing, (P.), B., 409.
- McNutt, J. D. See Winchester Repeating Arms Co.
- Maconachie, J. E., and Tasker, C., coke for domestic heating, B., 884.
- Macovski, E. See Candea, C.
- McPetrie, J. S., electrical properties of materials at high radio frequencies, A., 153.
- McPhail, M. K. See Zimmermann, W.
- McPherson, A. T., and Bekkedahl, N., heats of reaction of the system rubber-sulphur, B., 642.
- and Cummings, A. D., refractive index of rubber, B., 775.
See also Thibodeau, W. E.
- MacPherson, H. G., magneto-optic method of chemical analysis, A., 594.
- McQuaid, H. S. See Grasselli Chem. Co.
- McQuaid, H. W., effect of McQuaid-Ehn grain-size on hardness and toughness of automotive steels, B., 550.
- McQuarrie, D., accelerator [of rubber vulcanisation] for cable insulation, B., 369.
- McQuarrie, J., and Walker, P. C., production and combustion of oil gas in furnaces, (P.), B., 757.
- McQueen-Williams, M., maternal behaviour in male rats, A., 1171. Sex comparison of gonadotropic hormone content of anterior pituitaries from rats before and after puberty, A., 1424.
- McQuillen, A. See Clemo, G. R.
- McQuiston, R. C., sulphur preparations for use as insecticides, fungicides, and ovi-cides, (P.), B., 327.
- McRae, J. A., and Townshend, A. S., derivatives of substituted succinic acids. I. Action of alkaline sodium hypobromite on *s*-diphenylsuccinamide and 3:4-diphenylsuccinimide, A., 212.
- Macrae, T. F. See Dunlop, (Miss) H. G., and Lumsden, T.
- McRae, W., report of Imperial mycologist, B., 517.
- Macready, G. A., decomposition of ores, (P.), B., 106.
- Macri, V., qualitative chemical analysis, A., 835. Determination of a mixture of formaldehyde and formic acid in presence of iodic acid, B., 539.
- Macswiney, B. A., composition of human perspiration, A., 1147.
- and Spurrell, W. R., effect of fat on gastric motility, A., 1408.
See also Easson, A. P. T.
- McTiernan, C. See Meyer, O. O.
- Maculla, A. See Graff, S.
- Macura, K. See Sereda, J.
- McVeigh, I., bleaching leaves, A., 422.
- McVey, W. C., determination of nitrates in meats and meat products, B., 1020. Determination of nitrate- and nitrite-nitrogen in meats and meat products, B., 1020.
- McVickers, L. D. See Smith, G. Frederick.
- Macwalter, R. J. See Drummond, J. C.
- MacWood, G. E., and Urey, H. C., Raman spectra of methyl deuteride, A., 1446.
- Macy, H., and Anderson, A. E., effect of temperature, salt, and acidity on growth of *Oospora lactis*, A., 786.
- Macy, I. G. See Barnes, D. J., Hunscher, H. A., and Kenyon, F.
- Madaeva, O. S. See Magidson, O. J.
- Maddock, A. J., equilibrium emission and activity changes in oxide-coated cathodes, A., 425. Absolute intensities in spectrum of quartz mercury arcs and their variation with temperature changes of the surrounding air, A., 800. Simple filters for isolating lines in the mercury spectrum, A., 1097.
- Madelung, E., and Flügge, S., viscoelasticity, A., 575.
- Mader, E. O., effect of varying concentrations and lime: copper ratio of Bordeaux mixture in potato spraying, B., 118.
- Madge, E. W., physico-chemical properties of [rubber] latex and their significance in manufacture, B., 563.
- Madge, N. G., Keen, A. W., and Nat. India Rubber Co., rubber thread, (P.), B., 962.
- Madhok, M. R., use of soil as a medium for distributing legume organism culture to cultivators, B., 282.
- Madigan, S. E. See Lark-Horovitz, K.

- Madinaveitia, J.**, reactions with 2-methyl- α -naphthaquinone, A., 494.
- Madison, R. R.**, and **Deventer, J. K. van**, stability of streptofibrinolysin, A., 1396.
- Madisson, H.**, sodium salicylate poisoning; favourable influence of glucose, A., 1533.
- Madon, V. F.**, and **Sapegno, E.**, carbohydrate metabolism at high altitudes. II. Action of adrenaline (and content of K and Ca in the blood), A., 241.
- Madorsky, S. L.**, and **Adams, J. R.**, extraction of Georgia shale and wyomingite with hydrochloric acid [for production of alumina and potash], B., 627.
- Madrid, V. J.**, treatment of seeds with coal-tar kerosene emulsion as protection against certain insects, B., 1012.
- Madsen, E. H.**, detection of carbon tetrachloride in chloroform, B., 442.
- Madsen, J.**, ammonia content of urine in convulsive patients, A., 108. Acid-base equilibrium in patients with convulsions, A., 108. Ratio of acids and ammonia in urine of normal persons and convulsive patients, A., 108.
- Madsen, L. L.**, **McCay, C. M.**, and **Maynard, L. A.** [with **Davis, G. K.**, and **Woodward, J. C.**], synthetic diets for herbivora, with special reference to the toxicity of cod-liver oil, A., 1529.
- Madsen, M.**, rotary dryer, (P.), B., 1073. and **Madsen Iron Works**, paving material, (P.), B., 1097.
- Madsen, M. A.**, [disc] grinding mill, (P.), B., 50.
- Madsen, P.**, dry purification [of gas], B., 884.
- Madsen Iron Works.** See **Madsen, M.**
- Maechling, E. H.** See **Pappenheimer, A. M.**
- Maeda, T.**, action of compounds of the thymol and carvacrol series on respiration and blood-pressure and their antagonistic action to adrenaline in its raising of blood-pressure, A., 394. Influence of water-soluble heavy metal salts on blood-glutathione, A., 398.
- Maegdefrau, E.** See **Jacob, Arthur.**
- Magi, J.**, effect of feeding-stuffs on quality of butter, B., 248.
- Maehara, K.**, hypoglycæmic action of yeast extracts, especially relation of yeast extracts to true hormones. I. Influence of yeast extract on normal and adrenaline blood-sugar balance. II. Relation between effect produced on blood-sugar by yeast extract and insulin: influence of the thyroid, A., 243.
- Maerteus, F.**, electric accumulators, (P.), B., 1100.
- Märzinger, J.** See **Hess, E. M.**
- Maestri.** See **Ceruti.**
- Maetz, O.**, lehrs for annealing glassware, (P.), B., 1044.
- Maevskaja, V. P.** See **Komar, N. P.**
- Maffei, A.**, sodium aluminate, A., 703.
- Maffei, A.**, and **Battaglia, A.**, surface activity of silica gel treated with lime, A., 1200.
- Magaram, E. E.** See **Ratner, E. I.**
- Magat, J.** See **Abragam, D.**
- Magat, M.**, change of properties of water around 40° A., 815.
See also **Abragam, D.**, and **Bauer, Edmond.**
- Magid, L.** See **Husa, W. J.**
- Magidson, O. J.**, **Delektorskaja, N. M.**, and **Lipovitch, I. M.**, 8-aminoquinoline derivatives as antimalarials. III. Effect of branching of the diethylaminoalkyl chain on the antimalarial effect, A., 500.
- Magidson, O. J.**, and **Gorbovizki, I. E.**, derivatives of 1-methylanhydrocotarnine, A., 767.
- Madaeva, O. S.**, and **Rubzov, M. F.**, 8-aminoquinoline derivatives as antimalarials. IV. Compounds with long chains in position 8, A., 989.
- Magie, R. O.**, variability of monosporic cultures of *Coccomyces hiemalis*, A., 786.
- Magill, T. P.** See **Francois, T., jun.**
- Magill, W. S.** See **Western Elec. Co.**
- Magini, P.** See **Canneri, G.**
- Magistad, O. C.**, carotene and xanthophyll in pineapples, A., 1040.
and **Farden, C. A.**, field experiments with pineapples, B., 166.
See also **Abel, P. A. E.**, and **Tam, R. K.**
- Magistris, H.**, inhibition of thyroid action by metabolic hormone of anterior pituitary gland. I. Liver-glycogen, A., 541.
- Magnan, C.** See **Bierry, H.**
- Magnesium Development Corporation.** See **Wood, R. T.**
- Magnesium Products, Inc.** See **Kemmer, F. R.**
- Magness, L. F.**, motor fuel, (P.), B., 216.
- Magnusson, T.** See **Siegbahn, M.**
- Magraw, D. A.**, and **Sievert, C. W.**, determination of lactose in mixed feed, B., 522.
- Magrou, J.**, distance action of enzymic oxidation of quinol on development of the eggs of the sea-urchin, A., 519.
- Magruder, W. C., jun.**, and **Carter Carburetor Corp.**, surface treatment for zinc-base alloys, (P.), B., 1051.
- Maguire, J. F.** See **Bonney, R. D.**
- Magyar Ruggyantáruvgyár Részvénytársaság.** See **Internat. Latex Processes, Ltd.**
- Mahadevan, C.**, studies in coal by X-ray diffraction methods, B., 931.
- Mahal, H. S.**, **Rai, H. S.**, and **Venkataraman, K.**, synthetical experiments in chromone group. XV. Synthesis of formononetin, daidzein, and ψ -baptigenin. XVI. Chalkones and flavanones and their oxidation to flavones by selenium dioxide, A., 90, 1129.
and **Venkataraman, K.**, synthetical experiments in chromone group. XIV. Action of sodamide on 1-acyloxy-2-acetonaphthones, A., 90.
See also **Bhalla, D. C.**
- Mahanti, P. C.**, electric moments of monohydric normal, secondary, and isohydric alcohols, A., 684. Band spectrum of vanadium oxide, A., 805. Band spectrum of aluminium bromide, A., 913. Electric moments of alkyl monohalides, A., 1056. Fine structure analysis of the red bands of magnesium oxide and isotope effect, A., 1188. Potential energy curves and structure of alkaline-earth oxides, A., 1448.
- Mahin, E. G.**, and **Lee, E. F.**, influence of non-metallic inclusions on precipitation of primary cementite in hypereutectoid steels, B., 854.
- Mahin, W. E.** See **Strauss, J.**
- Mahler, G. T.** See **New Jersey Zinc Co.**
- Mahlie, W. S.**, removal of hydrogen sulphide in sewage by aeration, B., 431.
- Mahlstedt, H.**, and **United Chromium, Inc.**, chromium plating, (P.), B., 1052.
- Mahncke, H. E.**, and **Noyes, W. A., jun.**, photochemical studies. XXI. Absorption spectrum of germane, A., 561. Ultra-violet absorption spectra of *cis*- and *trans*-dichloroethylenes, A., 1299.
- Mahoney, W.**, retrobulbar neuritis due to thallium poisoning, A., 1160.
- Mahorner, H.** See **Ochsner, A.**
- Mahr, C.** See **Strecker, W.**
- Mahr, J.** See **Brand, K.**
- Mai, L. S.** See **Voinilovitch, G. I.**
- Maier, C. G.**, zinc refining, (P.), B., 908.
- Dean, R. S.**, and **Doerner, H. A.**, reduction of zinc ores, (P.), B., 908. Reduction of sulphur compounds to elementary sulphur or hydrogen sulphide, (P.), B., 100.
and **Thomas, S. B.**, reduction of iron ore by natural gas, B., 103.
- Maier-Leibnitz, H.**, collision efficiency of slow electrons and inert gas atoms, A., 1185.
- Maignon, F.**, effect of fat on utilisation of protein, A., 388. Co-existence in blood of an animal in a state of anaphylactic presensitisation of a sensitising and of a preserving substance, A., 771. Comparative value of fat and carbohydrate in utilisation of protein, A., 1015. Tissue-enzymes, A., 1023.
- Mail, G. A.**, soil-temperature apparatus for field work, B., 1157.
- Maile, W. C. D.**, and **Scott, K. J. L.**, "digestibility" of common foodstuffs as determined by radiography, A., 1153.
- Mailey, R. D.**, and **Gen. Elec. Vapor Lamp Co.**, reaction chamber, (P.), B., 530.
- Maillard, A.**, hydrogenation of anthracene, A., 1116.
- Maillet, G.**, dichromates of organic bases [as photographic sensitisers], B., 1167. Sensitising colloids employed in processes for photomechanical reproduction, (P.), B., 125.
- Main, R. J.**, and **Leonard, S. L.**, nature of gonadotropic hormone found in urine of a case of teratoma testis, A., 542.
- Main, R. K.**, and **Schmidt, C. L. A.**, combination of bivalent manganese with certain proteins, amino-acids, and related compounds, A., 1460.
- Main, S. A.**, properties, characteristics, and uses of stainless steel, B., 634.
- Maino, M. M.** See **Frattini, B.**
- Mains, G. H.** See **Westinghouse Elec. & Manufg. Co.**
- Mainsbreck, P.**, simplified molecular constant, and milks from the Brussels district, B., 571.
- Mainstone, P. A.**, tribo- and photo-electric effects for palladium, A., 435.
- Maio, M.**, relation between metabolism of carbohydrates, uric acid, and oxalic acid in diabetes, A., 1008.
- Mair, B. J.**, ebullioscopic method for determining the mol. wts. of non-volatile petroleum fractions, B., 581. and **White, J. D.**, separation of petroleum hydrocarbons with silica gel, B., 886.
- Mair, J. A.** See **Hardie, T.**
- Mair, T. G.** See **Oldham & Son.**
- Mairlot, E.** See **Del Fresno, C.**
- Maisin, J.**, **Vassiliadis, H.**, and **Godenir, A.**, existence in liver of substances inhibitory to benzopyrene cancer of the white mouse, A., 1526.
See also **Koch, W.**
- Maister, H. G.**, production of calcium butyrate [by fermentation], (P.), B., 121.
- Maiti, B. B.** See **Sirkar, S. C.**
- Maitland, P.**, and **Mills, W. H.**, experimental demonstration of the allene asymmetry, A., 968.
- Maiuri, G.** See **Maiuri Refrigeration Patents.**

- Maiuri Refrigeration Patents, Ltd., and Maiuri, G.**, expansion chambers and presses for solidification of carbon dioxide and other gases, (P.), B., 258. Solid carbon dioxide, (P.), B., 452. Solidifying carbon dioxide, (P.), B., 452.
- Maiweg, L.** See **Sevag, M. G.**
- Maizels, M.**, combination of coagulated protein particles with anions, A., 372. Permeation of erythrocytes by cations, A., 1260.
- Maizite, J.**, conifer-needle oils from Latvia, B., 1023.
- Majantz, A. D.** See **Lainer, V. I.**
- Majer, V.**, polarographic studies with the dropping mercury cathode. XLVI. Current-voltage curves using small anodes. XLVII. Passivation of small mercury anodes, A., 706, 936. Micro-polarographic tests. I. Apparatus and technique, A., 1097.
- Majewska, Z.** See **Leppert, Z.**
- Majewski, P.** See **Korczewski, M.**
- Majmin, R.** See **Przylecki, S. J. von.**
- Major, R. T.**, recent contributions of chemistry to medicine, B., 748. and **Kline, J. K.**, β -methylcholine and its acetyl ester, A., 849. and **Merck & Co., Inc.**, *p*-sec-alkylaminophenols, (P.), B., 894. See also **Boese, A. B., jun.**, **Cook, E. W.**, and **Jones, L. W.**
- Majorov, S. N.**, variations in p_H during [spontaneous] souring of milk, B., 746.
- Majrich, A.** See **Krauz, C.**
- Majumdar, A. K.** See **Rây, P. R.**
- Majumdar, B.** See **Mukherjee, Jnanendra Nath**, and **Raychaudhury, S.**
- Majumdar, R. C.**, transport phenomena in an ionised gas, A., 9.
- Majumdar, A.** See **Chowdhury, J. K.**
- Majumdar.** See under **Majumdar.**
- Makarevitch-Galperin, L. M.**, synthesis of conjugated glycuronic acids during fasting, A., 1530.
- Makarieva, S. P.**, and **Biryukov, N. D.**, hardness of electrolytic chromium and influence of hydrogen dissolved in the metal, B., 905. See also **Biryukov, N. D.**
- Makarov, N. V.**, and **Tschibisov, K. V.**, preparation of photographic emulsions. II. Emulsions without ammonia, B., 525. See also **Tschibisov, K. V.**
- Makarov, P.**, analysis of effects of carbon monoxide and of cyanides on the [animal] cell by means of vital stains, A., 896.
- Makarov, S.**, and **Tschibisov, K. V.**, relation between resolving power of photographic emulsions and their preparation, B., 525.
- Makarova, M. M.** See **Povolotzkaja, K. I.**
- Makarova, P. T.** See **Fomin, S. V.**
- Makarova-Semljanskaja, N. N.** See **Schorigin, P. P.**
- Makens, R. F.**, silver xanthates, A., 596. See also **De Witt, C. C.**
- Makgill, R. H.** See **Haldane, J. S.**
- Makhl, R. T.**, tale and dunite sagger mixes, B., 803.
- Maki, T.**, indanthrene fusion. IX. Action of cresols and naphthols. X. Catalytic activity of phenols, B., 264. and **Nagai, Yoshio**, vat dyes of the benzanthrone series. XI. Formation and separation of isomeric dichlorobenzanthrones. XII. Constitution of the dichlorobenzanthrones, A., 1499.
- Makino, K.**, nuclein metabolism. IV. Oxidative deamination of nucleic acid with organic catalysts. V. Constitution of nucleic acid. VII. Polynucleotidase. VIII. Bound and free purines in ox organs. IX. Tissue-ammonia and nuclein metabolism, A., 524, 1003, 1529. Boric acid reaction and structure of the nucleic acids, A., 772. Degradation of nucleic acid with nuclease from ox-kidney, A., 784. Constitution of adenosinetriphosphoric acid, A., 1004.
- Makino, S.**, and **Takizawa, S.**, ammonium chloride for dry cells, B., 681.
- Makishima, G.** See **Takahashi, Sadao.**
- Makishima, S.**, theoretical evaluation of electrode potentials, A., 1325. See also **Kameyama, N.**
- Maklakov, N. F.**, and **Arkhipov, M. S.**, kinetics of the reaction $2SO_2 + O_2 = 2SO_3$ with a vanadium catalyst, A., 309.
- Shuravleva, T. G.**, and **Judina, V. I.**, vanadium catalysts for contact sulphuric acid production, B., 268.
- Makrinow, J. A.**, biological treatment of plant residues. III. Propagation of *Azotobacter* and accumulation of nitrogen in decomposition of plant residues, B., 690.
- Maksymowicz, J.** See **Dziwowski, K.**
- Makushinskaja, N. S.** See **Ruibak, B. M.**
- Malát, B.**, effect of liming on reaction of plant juices, A., 552; B., 690.
- Malachowski, R.**, and **Czornodola, W.** [with **Adamczka, J.**], propene- $\alpha\beta$ -tricarboxylic acids, A., 475. and **Sienkiewiczowa, R. J.**, action of phosphorus pentachloride on ethylenetetracarboxylic acid, A., 328.
- Malan, A. I.** See **Du Toit, P. J.**
- Malaseheuko, S. V.**, welding and coating with ferrosilid, B., 1050.
- Malaspina, J. A.**, moulding sand for making cores and flask-moulding, free and template mouldings, (P.), B., 727. Moulding sand for cores and stone bed moulds, (P.), B., 727.
- Malaviya, B. J.**, and **Dutt, S.**, photo-reaction in tropical sunlight, A., 1087.
- Malcolm, V. T.**, and **Chapman Valve Manufg. Co.**, apparatus for acting on chemical compounds [by silent electric discharge], (P.), B., 639. Case-hardening of steel, (P.), B., 906. Hardening of steel, (P.), B., 1098. See also **Chapman Valve Manufg. Co.**
- Malczynski, S.**, and **Lankosz, J.**, cholesterolæmia after infra-red irradiation of the castrated dog, A., 770. See also **Franke, M.**
- Malenke, E.** See **Frey, A.**, and **Reindel, F.**
- Maliar, S.** See **Palladin, A. V.**
- Malik, A. M.**, and **Alvi, S. M. K.**, steel, (P.), B., 999.
- Malikov, A. D.**, coefficients of heat conduction for evaporation of various chemical compounds, solutions, and liquid mixtures, B., 530.
- Malinowski, A. E.**, and **Klass, I. A.**, effect of temperature on interruption of gas explosions (quenching of stationary gas fires) by an electric field, B., 979.
- Naugolnikov, B. I.**, and **Tkachenko, K. T.**, effect of a mechanical counter-wave on an advancing explosion wave, B., 1167.
- Rossichin, V.**, and **Timkovski, V. P.**, effect of frequency of the electric field on velocity of combustion of gases, A., 708.
- Malinowski, A. E.**, and **Skrinnikov, J. A.**, possibility of ignition of electrolytic gas by fast electrons, A., 1212.
- Malinowski, V. S.**, and **Lopatina, E. P.**, velocity of oxidation of sodium arsenite by atmospheric oxygen under pressure, A., 1082. Analysis of mixtures of sulphites, sulphates, meta-arsenites, and arsenates, A., 1336.
- Malishev, B. W.**, direct alkylation of olefines under catalytic influence of phosphorus pentoxide, A., 852.
- Malisoff, W. M.**, and **Anding, O. E., jun.**, determination of mercaptans in hydrocarbon solvents, B., 484. and **Atlantic Refining Co.**, treatment of hydrocarbons, (P.), B., 616. Treatment of sludge, (P.), B., 616. Hydrocarbon oil [desulphurising] treatment, (P.), B., 713.
- Maljarov, K. L.**, and **Judenitsch, T.**, colorimetric determination of small quantities of sodium, A., 54.
- Malkin, I. M.** See **Poljakov, M. V.**
- Malkin, T.**, the odd-membered n -primary alcohols (the $\alpha \rightarrow \beta$ transition), A., 921.
- Malkomesins, P.** See **Bömer, A.**
- Malkov, A.**, rôle of ferrous and ferric ions in fermentation and oxidation processes of yeasts, A., 253. Determination of sugars by Bertrand's method in presence of phosphates. VI. Oxidation of sugars by cupric oxide in alkaline solutions, A., 329.
- Malley, O. E.** See **Suden, C. T.**
- Mallick, S. M. K.** See **Shortt, H. E.**
- Mallinckrodt-Haupt, A. S. von**, vitamin-D content of ointment bases containing cholesterol. I. Absorption through the intestinal mucosa. II. Absorption through the skin, B., 429.
- Mallmann, W. L.**, and **Edwards, O. F.**, germicidal activity of available chlorine as measured by the *o*-tolidine and iodometric tests, B., 528. See also **Eldridge, E. F.**
- Malloch, J. G.**, and **Hopkins, J. W.**, variability in experimental baking using hand and machine manipulation, B., 426. See also **Larmour, R. K.**
- Mallory, G. E.**, and **Valaer, P.**, determination of artificial colour in whisky, B., 76. Separation of strychnine from cinchona alkaloids, B., 1067.
- Mallory & Co., Inc.**, *P. R.*, [constant-potential] electrical batteries, (P.), B., 508. Voltaic couples, (P.), B., 1002. See also **Booe, J. M.**, **Fruth, H. F.**, **Gwyn, C. B., jun.**, and **Weiger, J. A.**
- Malm, C. J.** See **Eastman Kodak Co.**, and **Kodak, Ltd.**
- Malm, F. S.** See **Kemp, A. R.**
- Malmberg, M.**, and **Euler, H. von**, vitamin-C content of brain after administration of the vitamin, A., 1286. See also **Euler, H. von**, and **Karrer, P.**
- Malméjac, J.**, **Chevallier, A.**, and **Choron, Y.**, adrenal cortex and vitamin-A content of the blood, A., 1173.
- Desanti, E.**, and **Dumazert, C.**, hyperglycæmic effect of section of the depressor nerves in the dog, A., 641. Causes of brevity of the hyperglycæmic effect produced by section of the four depressors in the dog, A., 1010.
- Donnet, E.**, and **Dumazert, C.**, hyperglycæmia following excitation of the Cyon-Ludwig depressor nerve in the rabbit, A., 641.

- Malméjac, J., and Donnet, V., variations of blood-sugar in continuous intravenous injection of adrenaline, A., 1031.
- Donnet, V., and Desanti, E., continuous injection of adrenaline and adrenaline secretion, A., 1172. A mechanism by which continuous injection of adrenaline reduces adrenaline secretion, A., 1172.
- and Dumazert, C., origin of the hyperglycæmia caused by centripetal excitation of the dog's vagus nerve divided at the neck, A., 770.
- See also Chevallier, A.
- Malmstrom, H. E. See Davis, M. N.
- Malone, J. J. See Doyle, J. D.
- Malotau, R. N. M. A., calorimetric analysis of a binary mixture, A., 927.
- See also Raalte, J. van.
- Malowan, J. E., and Swann Research, Inc., mono- and di-chloro-isomer[ide]s of diphenyl, (P.), B., 93.
- Maluori, G., control methods for puzzuolana cement, B., 675.
- Malsch, J., and Hartley, G. S., Wien effect of a long-chain salt in aqueous solution, and an appropriate modification of method of measurement for brief current pulses, A., 37.
- and Keutner, E., measurement of absorption of short electric waves in dipole liquids, A., 683.
- Malsch, L. See Muth, F.
- Maltbie Chemical Co. See Fischelis, R. P.
- Malterre, H. See Joret, G.
- Malý, J., analysis of nickeling salts, B., 802.
- Mamoli, L. See Butenandt, A.
- Manai, A., hæmolysis from hypotonia proceeds according to a chromatic scale. IV., A., 509. Hæmolysis from physicochemical causes and corpuscular resistance. III. Fractionation of hæmolysis from hypotonia, A., 510.
- Mancet, (Mlle.) M. See Durand, J. F.
- Manchester Dyers (1914), Ltd., and Watkins, W., finishing of cotton and artificial silk fabrics, (P.), B., 801.
- Mancini, U., and Ruth-Aldo Co., apparatus for making artificial silk, (P.), B., 96. Cell for use in spinning cellulose acetate in the dry process, (P.), B., 668.
- Mandekic, V., manuring of soils in dry climates. V. Yugoslavia, B., 515. Manuring of newly cultivated soils. IV. Yugoslavia, B., 515.
- Mandel, H., physical interpretations of negative energy electrons, A., 425.
- Mandelbaum, M. R., and Gray Processes Corp., refining of hydrocarbons, (P.), B., 344.
- Mandelscham, E. I. See Porai-Koschitz, A. E.
- Mandelstam, S. See Balin, G.
- Mandelstamm, A., and Kaplun, E., rapid hormonal diagnosis of pregnancy in mature mice, A., 413.
- Mander Brothers, Ltd. See Wornum, W. E.
- Mandillon, G. See Genevois, L.
- Mandl, F. See Frederich, A.
- Mandler, E. See Lustig, B.
- Manegold, E., capillary systems. XII. Sphere-spiral as a structure element in homogeneous and heterogeneous spherical packing, A., 284, 443.
- and Lindemann, Hans, capillary systems. XVII. Regular logarithmic sphere-spirals and sphere-screws, A., 1200.
- Manegold, E., and Stüber, C., electrical transport through phase boundaries. System II: glass-molten metal (mercury). System III: glass-molten salt (silver nitrate), A., 1071.
- Manen, (Frl.) B. van, moving striations in neon, A., 1.
- Mangels, C. E., varietal and regional variation in properties of wheat starches, B., 169.
- and Martin, J. J., jun., effect of different buffers and type of substrate on diastasis of wheat-starch, B., 649. Peptisation of wheat-flour proteins by organic acids, B., 651.
- Mangini, A., [metallic salts of] diazoamino-compounds. II. and III. (Unsaturated chromophores. I.), A., 969. I-Chloro-3:4-dinitrobenzene series. III., A., 1489. Effect of the ketodivinylic chain on colour of metallic salts of hydroxyvinyl ketones. I. Salts of dialcylideneacetone (unsaturated chromophores. II.), A., 1371. Alcohol and sugar content of olive press-water. IV., B., 237.
- and Deliddo, C., 1-chloro-3:4-dinitrobenzene series. II., A., 855.
- Mangold, E., and Lintzel, W., digestibility by pigs of nutrients in ground sweet-lupin seeds, B., 522.
- and Stotz, H., digestibility and nutrient value of sweet-lupin seed for ruminants, B., 875.
- See also Lintzel, W.
- Mangold, O., combinations of different qualities of taste as a method of investigating the chemical sense of the earthworm, A., 1160.
- Manheimer, J., oxidised bitumen, B., 1080.
- Manian, S. H., Urey, H. C., and Bleakney, W., relative abundance of oxygen isotopes O^{16} : O^{18} in stone meteorites, A., 191.
- Manjean, S. See Rathery, F.
- Manjunath, B. L., and Siddappa, G. S., supposed occurrence of acids of uneven number of carbon atoms in vegetable oils and fats. I. Daturic acid from seeds of *Datura stramonium*, Linn., A., 1435.
- See also Krishnaswamy, P. R., and Rao, U. S. K.
- Manley, C. H., fish pastes, B., 378.
- Manley, J. H., and Duffendack, O. S., collisions of the second kind between magnesium and neon, A., 274.
- Manley, J. J., equalisation of temperatures of interferometer tubes, A., 57. New precision colorimeter, A., 320. Devices for ensuring constancy in the masses of precision weights, A., 467.
- Manley, R. E. See Texas Co.
- Manlove, Alliot & Co., Ltd. See Reynolds, W. H.
- Manly, R. S. See Holmes, H. N.
- Mann, A. N. See Tuchfarber, F.
- Mann, C., cleaning of precious metals, especially silver, (P.), B., 66.
- Mann, F. C. See Bollman, J. L., and Pollack, H.
- Mann, F. G., and Purdie, D., novel type of isomerism among complex metallic salts, A., 1214.
- Mann, H. B. See Skinner, J. J.
- Mann, H. H., tea soils, B., 1009.
- Mann, M. M., and Nielsen, W. M., effect of hydrogen on afterglow in mercury vapour, A., 138.
- Mann, R. J. See Brit. Celanese.
- Mann, T., chemical processes in muscle. V. Phosphate transfer through phosphopyruvic acid. VII. Dephosphorylation of phosphoglyceric acid in fluoride-poisoned muscle, A., 890, 1150.
- and Ostern, P., ammonia content and ammonia formation in muscle. XXI. Inhibition of ammonia formation by alkaline buffer solutions, A., 110.
- See also Parnas, J. K.
- Mann, W. B., exchange of energy between a platinum surface and gas molecules, A., 8.
- See also Riches, T.
- Mann-Lutwak, C., chemical reactions in muscle. IV. Specificity of phosphoglyceric acid as phosphate donor, A., 387.
- Manneback, C., calculation of fundamental frequencies of a molecule of the type X_6 with plane hexagonal symmetry, A., 685. Calculation of fundamental frequencies of vibration of a molecule X_6Y_6 , having plane hexagonal symmetry, A., 1057.
- See also Bossche, M. van den.
- Mannes, L. D., and Godowsky, L., jun., photographic colour process, (P.), B., 703. Colour photography, (P.), B., 975.
- See also Kodak, Ltd.
- Mannessier-Mameli, (Sna.) A., action of anilines on saccharin and thiosaccharin, A., 634. o-Sulphonamidothiobenzanilides, A., 634. Pyrolysis of saccharinoxime, A., 763.
- Mannich, C., new arsinole ring closure, A., 997. Vinylacetic [d^{β} -butenoic] acid, A., 1482.
- [with Handke, K., and Baumgarten, G.], determination of morphine, particularly in opium, A., 507.
- and Abdullah, S. M., bases obtained from acetophenone, formaldehyde, and ammonium chloride, A., 355.
- and Margotte, E., γ -chloroamines and their reactions, A., 478.
- and Veit, F., derivatives of dipidine, A., 629.
- Manning, A. H., rotary drums for drying or other processes, (P.), B., 257.
- Manning, J. R., fish meal in animal feeding, B., 699. Bibliography on cod-liver oil in animal feeding, B., 699.
- Manning, M. F., energy levels of a symmetrical double minima problem with applications to the NH_3 and NH_3^+ molecules, A., 569. Exact solutions of the Schrödinger equation, A., 1187.
- and Rosen, N., potential function for vibrations of diatomic molecules, A., 150.
- Manning, W. M., photochemical studies. XX. Photochemical decomposition of acetone in the Schumann region, A., 178.
- See also Noyes, W. A., jun.
- Manns, T. F. See Russell, R.
- Mannweiler, G. E. See Harned, H. S.
- Mano, G., absorption of α -rays and Π -particles by matter: penetration and retardation, A., 275.
- Manochina, O. See Danilov, S. N.
- Manoilov, K. E. See Mazel, V. A.
- Manolescu, (Mlle.) L. See Gheorghui, C. V.
- Manresa, M., and Reyes, N. C., hematological studies on cattle. I. Hemoglobin, erythrocytes, and leucocytes in different breeds of cattle, A., 1391.

- Mansfeld, G., and Horváth, G., rôle of the nervous system in action of thyroxine on cell respiration, A., 1285.
- Mansfeldscher Kupferschieferbergbau Akt.-Ges., purification of sulphuric acid, (P.), B., 269.
- Manson, G. J., paper-waxing composition, (P.), B., 18.
- Manson, W., and Fairbairn, E. W. H., filters for cleaning, humidifying, or drying air or other gases, (P.), B., 611.
- Manta, J., condensation of aromatic ketones with formaldehyde, A., 340.
- Mantegazza, A., analytical tests on formaldehyde. I. Determination of formaldehyde. II. Determination of methyl alcohol in formaldehyde, B., 1084.
- Mantere, V. See Kauko, Y.
- Mantzell, E., direct measurement of cathodic current distribution, A., 306.
- Manuel, J., production of sterols by plants; the "oily chloroplasts" described by Savelli in cacti, A., 1041.
- Manufactures de Machines Auxiliaires pour l'Electricité & l'Industrie, filters for liquids, (P.), B., 787.
- Manulkin, Z. M. See Naumov, S. N.
- Manunta, C., origin of uric acid in hibernating eggs of the silkworm, A., 376.
- Biochemistry of two *Lepidoptera*: the hive-mite, *Galleria mellonella*, and the silkworm, *Bombyx mori*, A., 646.
- Manusova, N. B. See London, E. S.
- Manville, I. A., and Chuinard, F. G., vitamins of pears. II. Vitamin-A, -B, and -C in the winter Nelis, D'Anjou, and Bose after a short storage period, A., 414.
- McMinis, A. S., and Chuinard, F. G., vitamins in apples; vitamin-A, -B, and -C contents of the Rome Beauty, Delicious, Stayman, yellow Newtown, and winesap, A., 414.
- Manzoni-Ansidei, R., Raman spectrum of isomeric nitrotoluenes, A., 1301.
- See also Bonino, G. B.
- Mapara, H. M., influence of acidity of agar on Liesegang rings of lead chromate and lead iodide, A., 580.
- Mapes, D. B., and Frankforter Oil Processes, treatment of hydrocarbons, (P.), B., 893.
- Mapson, L. W. See Carter, G. S.
- Marais, J. K., and Petrick, A. J., auto-transformer electric furnace unit for distillations on a laboratory scale, B., 67.
- Marais, J. S. C., and Rimington, C., isolation of poisonous principle of *Dimorphotheca cuneata*, Less, A., 551.
- Marangoni, P., growth, productivity, life period, and progeny of guinea-pigs receiving high dosages of yeast (vitamin-B), A., 792. Cultivated rhubarbs, B., 566.
- Marangoni, P. L. See Scoz, G.
- Marañón, J., and Cosme, L., nitrogen distribution and carbohydrate partition in Philippine rice bran, B., 1115.
- Perez, A., and Russell, P. F., Philippine totaquina, B., 923.
- Marathon Paper Mills Co. See Abrams, A.
- Marble, J. P., age of allanite from Amherst County, Virginia, U.S.A., A., 1344.
- Marcel, C. See Mesnil, L.
- March, A., adsorption theory of electrokinetic potential, A., 1316.
- Marchant, E. H. J., estimated number of nemas in soils of Manitoba, B., 243.
- Marchant, G. O. See Walker, J. P.
- Marchenko, A. I., buffer properties of soils of the Valdai Highlands, B., 198.
- Marchesini, G. See Balbi, G.
- Marchlewska, J., determination of mol. wt. of cellulose by a dynamic osmotic method, A., 1062.
- Marchlewski, L., and Skulmowski, J., absorption of ultra-violet light by organic substances, A., 913.
- and Urbanczyk, W., chlorophyll derivatives, A., 1177.
- and Zglecowski, J., absorption of ultra-violet light by organic substances. XXXVII., A., 145.
- See also Goslawski, W.
- Marchovna, C. See Dziwowski, K.
- Marcille, R., determination of free sulphur dioxide in wines, B., 569.
- Marcinkowska, H. See Weil, S.
- Marcinkowski, B. See Hrynakowski, K.
- Marconi's Wireless Telegraph Co., Ltd., and Eddison, C., [resinous] cementing materials [for thermionic valve caps, etc.], (P.), B., 775.
- and Gill, E. W. D., sodium-containing electric lamps and electric-discharge devices, (P.), B., 911.
- and Rose, G. M., jun., welding of metals and manufacture of electron-discharge device electrodes, (P.), B., 909.
- and Umbreit, S., high-resistance alloys primarily for use in thermionic valve and similar cathode cores, (P.), B., 66.
- Marcotte, E., corrosion of reinforced concrete under maritime conditions, B., 631.
- Marcovitch, S., does laundering impair the efficiency of moth-proofing with sodium fluosilicate? B., 945.
- Marczewski, L. See Dziwowski, K.
- Marden, J. W. See Westinghouse Lamp Co.
- Marder, M. See Heinze, R.
- Mardles, E. W. J., paint and varnish problems in aeronautics, B., 238.
- and Helmore, W., inhibition of deterioration in olefinic oils and spirits, (P.), B., 394.
- Marean, M., solvent degreasing, B., 1003.
- Marek, J., Wellmann, O., and Urbányi, L., chemistry of bone-salts, A., 234, 1004.
- Influence of mineral composition of the ration on calcium, phosphorus, and total carbon dioxide contents of the blood-serum, A., 524.
- Resorption and excretion of calcium, magnesium, and phosphorus; distribution of inorganic phosphate in different sections of the digestive tract, A., 1531.
- See also Dolejšek, V.
- Marenzi, A. D., changes in blood-lactic acid after injection of posterior pituitary extract, A., 128.
- Effect of anterior pituitary extract on blood-lactic acid, A., 128.
- Lactic acid content of muscle of hypophysectomized toads, A., 259.
- Action of posterior pituitary on blood-lactic acid, A., 790.
- and Gerschman, R., pituitary and mineral substances of blood, A., 643.
- Mareš, V., spoilage of margarine, B., 363.
- Maresco, W. See Passerini, M.
- Marga, V. I. See Ivanov, N. N.
- Margaria, R., apparent change of p_H on stretching a muscle, A., 520.
- and Edwards, H. T., sources of energy in muscular work performed in anaërobic conditions, A., 110.
- Margaria, R., and Pulcher, C., alkalisation of muscle during contraction, A., 520.
- See also Edwards, H. T.
- Margenau, H., possible models of an electrostatic neutron, A., 1441.
- See also Pollard, E.
- Margolena, L. A., Lugol's solution for the Flemming triple stain, A., 422.
- Margolina, J. See Dogadkin, B.
- Margolis, E. I. See Borisov, P. P.
- Margolis, E. T. See Sandin, R. B.
- Margotte, E. See Lemmermann, O., and Mannich, C.
- Marguerre, F., thermodynamic energy storage method, (P.), B., 786.
- Margulies, S. See Schmid, L.
- Maria, C., determination of phosphorus in faeces, A., 1525.
- Marian, V. See Forrer, R.
- Marie, J. See Debré, R.
- Mariller, C., dehydration of alcohol by distillation under partial vacuum, B., 474.
- Marimpietri, L., potassium nutrition of wheat, B., 73.
- See also Tommasi, G.
- Marine, D., importance of relative iodine deficiencies in forms of goitre, A., 384.
- Baumann, E. J., and Rosen, S. H., effect of ascorbic acid on the thyroid and adrenals of guinea-pigs, A., 263.
- Rosen, S. H., and Spark, C., effect of iodine and desiccated thyroid on the anterior pituitary of goitrous and thyroidectomised rabbits, A., 1423.
- Marinesco, N., and Reggiani, M., blackening of photographic plates by ultrasonic waves, A., 458.
- Marinescu, M. See Blum, I. L.
- Maring, A., and Anaconda Wire & Cable Co., annealing furnace, (P.), B., 809.
- Marino, S., polypeptidemia in disease, A., 1261.
- Lipemia and uræmia, A., 1269.
- and Romeo, F., effect of acid secretion of the stomach on blood-sugar after histamine stimulation, A., 116.
- Marion, A. W., clover chaff as [soil] mulch, B., 245.
- Marion, D. F. See McCrea, F. D.
- Marion, L., resin of wheat straw, A., 1041.
- Mark, H., atom disintegration, atomic structure, and artificial radioactivity, A., 142.
- Stretching of highly polymerised substances, A., 1451.
- Motz, H., and Trillat, J. J., electron diffraction at highly polymerised substances, A., 813.
- and Trillat, J. J., electron diffraction by highly polymerised substances, A., 1451.
- See also Dostal, H., and Guth, E.
- Markee, J. E. See Davis, B. L., jun.
- Marker, R. E., androsterone, A., 1370.
- See also Levene, P. A.
- Markert, H., resistance to tearing and breaking of chemically treated wool, B., 665.
- Markevitch, I. T., colloidal sulphur; dehydration of sulphur hydrosols, A., 700.
- See also Dumanski, A. V.
- Markgraf, G. See Pongratz, A.
- Markin, B. I., and Müller, R. L., electrical conductivity of glass-like alkali borates, A., 1078.
- See also Müller, R. L.
- Marklen, E., wetting agents and boiling of cotton, B., 1135.
- Markley, K. S., m.-p. apparatus with rapid mechanical stirring, A., 56.

- Markley, K. S., Hendricks, S. B., and Sando, C. E., constituents of the wax-like coating of the pear, *Pyrus communis*, L., A., 1434.
- Markley, M. C., [determination of] flour particle size by the sedimentation method, B., 170.
- and Bailey, C. H., determination of carotenoid pigment concentration of small samples of whole wheat, B., 425. Pigments of the dilute alcohol or acetone extract of whole-wheat meal, B., 425. Pigments of the gasoline extract of wheat, B., 425.
- See also Steller, W. R.
- Markov, M., Dirac's vector model for multiplet spectra, A., 1298.
- and Rumer, G., Dirac's theory of permutations, A., 560.
- Markov, N. Y., use of sludge from causticising of green liquors in [paper] filling, B., 490.
- See also Resh, M. P.
- Markov, S. S. See Jakovkin, A. A.
- Markovic, L. See Giaja, J.
- Markovitch, M. B., composition of gases derived from various types of cracking, B., 1030.
- Moor, V. G., and Dementieva, M. L., velocity of absorption of unsaturated gases by sulphuric acid in presence of catalysts, A., 1085.
- Marks, G. W., proportionality studies on catalase, A., 248. Inactivation of catalases from marine plants by oxygen, A., 532.
- Marks, H. C. See Wallace & Tiernan Products, Inc.
- Marks, H. P. See Cope, O., and Corkill, A. B.
- Marks, J. A. See Jensen, J. B.
- Marks, M. E., direct determination of total oxygen in oils, B., 483.
- Marks, S. See Friend, J. A. N.
- Markus, H. C. See Wiebe, A. H.
- Markus, S., distillation of shale in the Ostashkov refinery, (B.), 1028. Preparation of ichthyol from Volga shale, B., 1028.
- Markush, E. A., and Pharma Chem. Corp., diazoimino-compounds from heterocyclic imines, (P.), B., 1134.
- Markwell, W. A. N., assay of coca extract, B., 573.
- Marlies, C. A., and La Mer, V. K., catalytic decomposition of nitroamide in acid and salt solutions, A., 1466. Improved method of extraction, A., 1476.
- Marling, P. E. See Hochwalt, C. A.
- Marloth, R. H., litchi (*Litchi chinensis*, Sonn.), B., 821.
- Marmier, L., catalysts for production of nitric acid by oxidation of ammonia, A., 43.
- Maron, S. H. See Prutton, C. F.
- Marotta, D., and Sorrentino, E., chemical and chemico-physical analysis of the mineral water of the Valleverde Spring (Abruzzo), A., 1219.
- Marquardt, J. C., calculating composition of milk from fat test alone, A., 379.
- Marquet, F. See Roche, A.
- Marquis, B. See New Jersey Zinc Co.
- Marquis, M. See Binet, L.
- Marr, (Miss) E. B., and Bogert, M. T., quinazolines. XXXIX. Synthesis of quinazoline derivatives structurally analogous to the angostura alkaloids, galipine and galipine. XL. Synthesis of a quinazoline derivative structurally related to papaverine, A., 760, 1134.
- Marras, S., poisoning by uranium nitrate. I. Modifications of the liver, A., 531.
- Marrian, G. F., and Beall, D., constitution of equol, A., 1032.
- and Cohen, S. L., colorimetric determination of oestrin in urine of non-pregnant women, A., 1034.
- and Newton, W. H., synergism between oestrin and oxytocin, A., 1425.
- See also Cohen, S. L.
- Marriott, R. H., refractive index of vegetable-tanned leathers, B., 601. Relation between structure of limed hide and finished [vegetable-tanned] leather, B., 644. The microscope as an aid to tannery practice, B., 739. Optical properties of tanned [hide] fibres. II. Birefringence of vegetable-tanned fibres, B., 818.
- and Merry, E. W., quality of vegetable-tanned sole leather. III., B., 197, 370.
- See also Lloyd, (Miss) D. J.
- Marris, N. A., identification of glass splinters, A., 270.
- Marrison, L. W., test for phosphate and arsenate, A., 1337.
- Marschak, F., and Stepanov, D., X-ray investigation of iron-nickel alloys, A., 1199.
- Stepanov, D., and Levius, L., electro-deposition of iron-nickel alloys. II., B., 905.
- See also Stepanov, D.
- Marschall, C., and Ouroussov, N., anthracene-9:10-disulphonic acid, A., 968.
- Marschke, G. See Reinhold, J.
- Marschner, R., removal of iron and manganese from polluted [Potsdam] water in a closed plant with high rate of filtration, B., 1168.
- Marschner, R. F. See Dow Chem. Co.
- Marsden, E., minimising colour content in kauri gum resin, (P.), B., 195.
- Marsden, L., [metal]-coated fabrics, (P.), B., 670.
- Marsene Corporation of America. See Gebauer-Fülneegg, E.
- Marsene Products Co. See Kratz, E. M.
- Marsh, B. H., basic copper sulphate, (P.), B., 226.
- See also Marsh, D. W.
- Marsh, B. S. See Fenn, W. O.
- Marsh, C. R., and Knipp, C. T., oxygen liquefier, A., 1096.
- Marsh, D. W., and Marsh, B. H., production of copper sulphate in solution from metallic or scrap copper and dilute sulphuric acid, (P.), B., 187.
- Marsh, G. L. See Cruess, W. V., Filippello, F., Joslyn, M. A., and Tucker, D. A.
- Marsh, J. K., preparation of pure europium, gadolinium, and terbium compounds, A., 180. Volumetric determination of the at. wt. of terbium, A., 909.
- and Sugden, S., artificial radioactivity of the rare-earth elements, A., 1049.
- Marsh, M. C., effect of heat on wool, B., 718.
- Marsh, Millard C., therapy of spontaneous mouse tumours: failure of additional inorganic compounds, A., 1008.
- Marsh, R. W. See Kearns, H. G. H.
- Marshall, A. E. See Saklatwalla, B. D., and Walker, G. E.
- Marshall, A. L. See Gen. Electric Co.
- Marshall, C. E., mineralogical methods for study of silts and clays, A., 603.
- See also Tomkeiff, S. I.
- Marshall, C. G., apparatus [water-current indicator] for use with water-softening plant, (P.), B., 978.
- Marshall, C. H. See Gen. Electric Co.
- Marshall, C. O., jun. See Cameron, L. T.
- Marshall, D. F., determinations of external heat loss of blast-furnaces, B., 593.
- Marshall, E. A., and Goodsit, E., calcium in pregnancy, A., 518.
- Marshall, E. K., jun., and Rosenfeld, M., control of cyanide action: cyanohydrin equilibria *in vivo* and *in vitro*, A., 247.
- Marshall, G. B. See Coons, C. N.
- Marshall, G. E., preventing spring emergence of codling moths from inaccessible places on trees, B., 742.
- Marshall, H. B., Brauns, F., and Hibbert, H., lignin and related compounds. XIX. Alkali-lignin, A., 1373.
- Marshall, H. L., Reynolds, D. S., Jacob, K. D., and Rader, L. F., jun., phosphate fertilisers by the calcination process; experiments with different phosphates, B., 601.
- See also Reynolds, D. S.
- Marshall, James. See Webster, R. L.
- Marshall, John, Iliff, J. W., and Young, H. R., house paints; effect of climate, wood types, and priming practices, B., 597.
- Marshall, Joseph, preparation of pure acriflavine, B., 253.
- Marshall, J. R., purification of coke-oven gas, B., 708.
- Marshall, K. I., and Internat. Precipitation Co., apparatus for separation of suspended material from gases, (P.), B., 533.
- Marshall, S. M., Nicholls, A. G., and Orr, A. P., biology of *Calanus finmarchicus*. VI. Oxygen consumption in relation to environmental conditions, A., 371.
- Marshall, T. J., and Hooper, P. D., soil survey of the Berri, Cobdogla, Kingston, and Moorook irrigation areas and the Lyryp village district, South Australia, B., 565.
- and Hosking, J. S., soil survey of the area at "Dismal Swamp," B., 242.
- See also Prescott, J. A.
- Marshall, T. M. B., determination of dry-cleaning soaps in petroleum solvents, B., 814.
- Marshall Field & Co. See Wilhelm, W. F.
- Marstrand, D. See Ponder, E.
- Marston, H. R., relationship between nutrition and wool production of merino sheep. I. Technique employed for determining utilisation of foodstuffs and the wool produced over short periods. II. Effect of administration of cystine, cysteine, sulphur, and of methionine on growth of wool of a merino ewe on a protein-poor ration, A., 389. Phosphorus requirements of sheep. II. Effect of supplying phosphatic supplements to growing lambs depastured on phosphorus-deficient country; effects of allowing growing merino sheep free access to phosphatic licks while depastured on a phosphorus-deficient area at "Dismal Swamp," South Australia, B., 248.
- Marszewska-Ziemiańska, J., micro-organisms decomposing organic matter in soil, B., 820.
- Martens, P. See Meurice, R.
- Martin, A. R., dielectric polarisation of phenol, A., 809.
- Martin, A. W. See Field, J., jun.
- Martin, D. See Carne, W. M.

- Martin, Eric, and Seiclounoff, F., glycogen of organs in Bright's disease after repeated injections of hypertonic sugar solutions, A., 518.
- Martin, Erich, and Vogel, R., system iron-iron oxide-calcium orthoferrite, A., 303.
- Martin, E. L. See Downs, F. E.
- Martin, Elmore L. See Fieser, L. F.
- Martin, E. M., and Langstroth, C. B., [welding rod for] electric welding, (P.), B., 858.
- See also Langstroth, C. B.
- Martin, F., sodium cacodylate, A., 72.
- Martin, F. D., and Newton, R. F., potentials of cells involving moving boundaries, A., 826.
- Martin, F. J., and Doyné, H. C., soil survey of Sierra Leone, B., 865.
- Martin, F. M. See Clavera, J. M.
- Martin, G. See Rubber Producers Res. Assoc.
- Martin, G. J., and Gardner, R. E., trichogenic action of the thiol group in hereditary hypotrichosis of the rat, A., 1402.
- Martin, G. T. O. See Arndt, F.
- Martin, Helgo, and Meyer, Lothar, reaction between carbon dioxide or oxygen and graphite; kinetics of combustion of coal, A., 588.
- Martin, Hubert, utilisation of petroleum products as horticultural spray materials, B., 199. Standardisation of petroleum and tar oils and preparations as insecticides, B., 822.
- Salmon, E. S., and Ware, W. M., spraying against pear scab, B., 247.
- See also Austin, M. D., Goodwin, W., Kearns, H. G. H., and Schildwächter, H.
- Martin, H. C., and Carborundum Co., rubber-bonded abrasive articles, (P.), B., 101.
- Martin, H. S. See Crago, A.
- Martin, J. J., jun. See Mangels, C. E.
- Martin, J. N., pollen of some *Leguminosae*, A., 1432.
- Martin, J. P., boron deficiency in sugar cane, A., 266. Malnutrition manifested by sugar cane grown in culture solutions from which essential elements are omitted, A., 266. [Plant] pathology, B., 118.
- Martin, J. T., and Tattersfield, F., effect of environmental conditions on pyrethrum (*Chrysanthemum cinerariæfolium*). I. and II., B., 167.
- See also Tattersfield, F.
- Martin, L., acid-base balance of gastric juice, blood, and urine before and after stimulation of gastric juice by histamine, A., 378.
- Steigerwald, E., Carroll, M. L., and Morgenstern, M., acid-base ratio of gastric juice, blood, and urine before and after stimulation of gastric juice by histamine, A., 512.
- Martin, L. C., Burke, S. A., and Knowles, E. G., accuracy of log sector method of quantitative spectroscopic analysis, A., 315.
- See also Knowles, E. G.
- Martin, L. D. See Bates, G. H.
- Martin, L. F. See Dow Chem. Co.
- Martin, L. H., Bower, J. C., and Laby, T. H., Auger effect in argon, A., 273. Ionisation in gases by X-rays, A., 682.
- Martin, O. V., and Texaco Salt Products Co., recovery of halogens from brines, (P.), B., 100. Sodium sulphate, (P.), B., 672.
- Martin, P. See Morin, H. G. S.
- Martin, Pierre. See Carrière, G.
- Martin, René, and Castaing, M., treatment of "casé ferrique" [iron turbidity] in white wines, B., 203.
- Martin, Robert. See Pien, J.
- Martin, S., and Cotner, F. B., serological studies of moth-proteins with reference to their phylogenetic significance, A., 510.
- Martin, W. McK., electrokinetic properties of proteins. III. Rôle of electrical forces in adsorption of gliadin at a glass-liquid interface, A., 698.
- Martin, W. S., report of the agricultural chemist, 1933, B., 819.
- and Griffith, G., determination of carbon in soils by the wet-combustion method, B., 917.
- Martindale, J. G. See Andrade, E. N. da C.
- Martinet, J. See Aalam, (Mlle.) T.
- Martinez, G., two modifications of 4:2':3':4':6'-pentamethoxychalkone, A., 1500.
- Martinez, M. See Täufel, K.
- Martinez, R. S. See Croucher, H. H.
- Martini, A., microchemical mineral analysis. V., A., 319.
- and Berisso, B., microchemical detection of mercury in food-stuff and toxicological analysis, B., 284.
- Martini, E., photodynamic action of flavins on ascorbic acid, A., 670.
- and Bonsignore, A., behaviour of reduced and oxidised ascorbic acid of tissues following scorbutogenic feeding; the scorbutic index, A., 669. Physiological action of ascorbic acid oxidised photodynamically, A., 669. Behaviour of ascorbic acid of tissues in inanition, A., 1176.
- and Pinotti, F., behaviour of oxidised ascorbic acid added to minced tissues of normal and scorbutic animals, A., 669. Ascorbic and dehydroascorbic acids in urine of normal and scorbutic guinea-pigs, A., 1176.
- Martins, T., "anti-hormones," A., 1034.
- Martos, A. See Wolf, L.
- Martuinov, M. F., influence of acid concentration and temperature on penetration, etc., in early stages of pulping, B., 58. Pulp bleaching, B., 222.
- See also Eliashberg, M. G.
- Martus, M. L., high-ampère caustic soda primary battery, B., 1000.
- and Becker, E. H., depolarising electrode [for dry batteries], (P.), B., 108.
- Maruyama, R. See Kono, M.
- Maruyama, S., antiscorbutic activity of ascorbic acid isolated from Japanese green tea, A., 793. Synthesis of ascorbic acid and its identity with vitamin-C, A., 846.
- Maruyama, T., unsaturated fatty acids and their derivatives. XI. Configuration of eruco- and brassido-dibromobehenic acid, A., 195.
- Marvel, C. S. See Copenhauer, J. W., Eck, J. C., Gibbs, C. F., Hunt, M., and Schniepp, L. E.
- Marvin, C. J. See Du Pont de Nemours & Co., E. I.
- Marvin, C. O., and Kaseno Products Co., waterproofing solution for glue, (P.), B., 371.
- Marvin, H. H., deep configurations of cobalt, A., 675.
- Marx, J., blood-magnesium in Recklinghausen's disease, A., 1270.
- Marx, P., blisters in floated asphalt, B., 903.
- Marynowska-Kaulbersz, H., physico-chemical properties of fruits and the effect of apple diet on acid-base balance, A., 892.
- Marza, F. D., and Chiosa, L., histochemical detection of potassium, A., 134. Histochemical determination of potassium during evolution of oocytes of the hen, A., 1523.
- Masai, S., separation of cresols [from coal tar], B., 795, 839.
- Masaki, O., and Kobayakawa, K., effect of hydrogen on self-reversal of resonance line of mercury, A., 272.
- and Okatome, T., influence of temperature on absorption in excited neon gas, A., 271.
- Masamune, H., biochemistry of carbohydrates. XI. Constitution and specific enzyme of benzoylglycuronic acid, A., 111.
- Mascarelli, L., and Gatti, D., diphenyl and its derivatives; new asymmetric 2:2'-disubstituted derivatives, A., 79.
- Mascherpa, P., fixation of elementary arsenic by ovalbumin in presence of radium emanation, A., 532. Toxicity of arseno-protein compounds, A., 532. Possibility of conveying to an organ cobalt bound to proteins of the same organ, A., 1276.
- and Cavalli, G., influence exercised by radioactivity on localisation in the lung of cobalt administered in combination with pulmonary proteins, A., 1276.
- Maschinenfabrik Komnick G.m.b.H., road-covering materials, (P.), B., 497.
- Maschinenfabr. Oerlikon, supplying liquid to electrolytic apparatus for decomposing water, (P.), B., 1053.
- Maschinenfabr. Surth, Zweigniederlassung der Gesellschaft für Linde's Eismaschinen A.-G., carbon dioxide ice, (P.), B., 1092.
- Maschmann, E., activation of plant proteinases, A., 122. Influence of arsenical compounds on papain, A., 897. Intracellular proteinases. XV. Inactivation of proteinases by iodoacetic acid. XVII. Effect of arsenic compounds on the activity of liver-cathepsin, A., 1279, 1538.
- and Helmert, E., influence of iron compounds on proteolytic and peptolytic processes, A., 404. Influence of salts of different buffer mixtures on proteolytic and peptolytic processes, A., 897. Intracellular proteinases. XIV. Activation and inhibition of papain by potassium ferricyanide. XVI. Activation and inhibition of papain, A., 1279, 1538.
- See also Bauer, Hugo.
- Maschovetz, V. P. See Vasiliev, Z. V.
- Mashino, M., soya-bean proteins, B., 826.
- Masin, J. S., and Swann Research, Inc., [alumina] polishing grain and its surface treatment, (P.), B., 455.
- Masius, N. See Kayser, F.
- Maskill, W., and Turner, W. E. S., rate of melting and refining of alkali-lime-silica glasses containing both soda and potash, B., 404.
- Maskin-Och Brobygggnads Aktiebolaget. See Degerth, J. G.
- Maslenitzki, I., melting out of sulphur from flotation concentrates in superheated water under pressure, B., 724.

- Masljanski, G. N., and Nemtsov, M. S., poisoning of molybdenum-zinc catalyst, A., 1085.
- Maslov, I. G., and Pakhomova, O. I., determination of tannides by azotisation with diazotised amines, B., 419.
- Maslov, P. S., and Kozuireva, E. I., determination of chemical composition of straight-run gasolines, B., 1030. Content of five- and six-membered naphthenes in the Maikop "toluene" gasoline fraction, B., 1031.
- Maslova, A. L., Stoliarova, A. A., and Uvarova, A. V., distribution of potassium in mechanical fraction of soils and its assimilability by plants, B., 1107.
- Maslova, M. S. See Pukirev, A. G.
- Masner, L., and Samec, V., abnormal behaviour of pelts in concentrated sulphite-cellulose waste liquors, B., 1007. Importance of alkalinity in manufacture of tanning extracts from sulphite-cellulose waste liquors, B., 1007.
- Mason, A. J., and Continental Illinois National Bank & Trust Co. of Chicago, apparatus for carbonising bituminous materials, (P.), B., 982.
- Mason, B. W. See Echberg, A. F.
- Mason, C. C., apparatus for measuring viscosity of liquids at high pressures, A., 840.
- Mason, C. M., and Leland, H. L., density of aqueous solutions of lanthanum, cerous, praseodymium, and neodymium chlorides at 25°, A., 1201.
- Mason, C. W., and Forgeng, W. D., effect of bismuth as an impurity on structure and allotropic transformation of tin, B., 595.
- Mason, E. D., basal metabolism of European women in south India and the effect of change of climate on European and south Indian women, A., 387.
- Mason, F. A. See Jones, D. C. R.
- Mason, G. M., Andersen, A. H., and Jane, R. S., generation of acetylene from calcium carbide, B., 835.
- Mason, H. C. See Howard, W. F.
- Mason, H. L., α -oximino- and α -amino-derivatives of *o*-hydroxypropionophenone, A., 85.
- Mason, I. D., and Palmer, L. S., preparation of white zein from yellow corn, A., 268. Utilisation of gelatin, casein, and zein by adult rats, A., 1272.
- Mason, P. See Pollack, H.
- Mason, R. B. See Aluminum Co. of America.
- Mason, R. C., accommodation coefficient of mercury ions on a mercury surface, A., 425.
- Masonite Corporation, fibre boards and similar products, (P.), B., 541. See also Boehm, R. M.
- Massa, F., loss of sugar during storage of beet, B., 200.
- Massachusetts Memorial Hospitals. See Levene, G.
- Massart, L. See Libbrecht, W.
- Massatsch, C., colorimetric determination of chlorogenic and caffeic acids in roasted coffee, B., 172.
- Massee, A. M., control of the strawberry tarsonomid fly (*Tarsonemus fragariae*, Zimm.), B., 1013. See also Greenslade, R. M., and Hey, G. L.
- Massengale, O. N. See Bills, C. E.
- Massey, H. S. W., excitation of molecular vibration by impact of slow electrons, A., 557.
- Massey, H. S. W., and Bullard, E. C., scattering of electrons by nitrogen molecules, A., 274.
- and Mohr, C. B. O., collisions of slow electrons with atoms. IV., A., 5. Interaction of light nuclei. I., A., 274. Masses of Be⁸ and C¹², A., 1051.
- Massey, L. M. See Guterman, C. E. F.
- Massey, R. E., report on botany and plant pathology, 1932—1933 [blackarm disease of cotton caused by *B. malvacearum*], B., 516.
- Massey-Harris Co. See Everett, C. E., and Verity, M. F.
- Massue, A., treatment of textile goods, etc., with liquids, (P.), B., 1042.
- Mast, S. O., and Fowler, C., permeability of *Amaba proteus* to water, A., 1027.
- Master, A. M., Jaffe, H. L., and Dack, S., low basal metabolic rates obtained by low-calorie diets in coronary artery disease, A., 1403.
- Master Builders Co. See Scripture, E. W., jun.
- Masterkov, T. A. See Karasik, P. I.
- Masterman, S. See Hughes, E. D.
- Masuda, E., and Nishida, K., iodo-fatty acids. I. Additive products of lower unsaturated acids with hydriodic acid, A., 1482.
- Masuda, K. See Ishikawa, F.
- Masukowitz, H., electric firing of white porcelain, B., 1143.
- Masumori, K. See Murata, M.
- Masumoto, H. See Honda, K.
- Measure, M. P. See Harley, C. P.
- Matano, C., X-ray studies in diffusion of the nickel-copper system, A., 23.
- Matanzev, A. See Essin, O.
- Matei, I., and Bogdan, E., condensation of acenaphthenequinone with cresols and naphthols; cyclic pinacols, A., 86.
- Matenko, E. J. See Shirov, N. F.
- Maters, C. See Böeseken, J.
- Matheny, C. S., and Nat. Fireproofing Corp., cellular clay products, (P.), B., 851.
- Mather, P. See Universal Oil Products Co.
- Mathers, F. C., and Prichard, C. E., separation of iron from indium with cupferron, A., 319.
- Webb, G. F., and Schaff, C. W., alkaline plating baths for cobalt and nickel with high throwing power, B., 502. See also Fox, E. L.
- Mathesius, W., (Berlin), processes of the formation of the earth, and periods of world drought, A., 60.
- Mathesius, Walther, enrichment and burning of gaseous fuels of low heat value, (P.), B., 90.
- Matheson, K. J. See Frazier, W. C.
- Matheson, L. A., atomic polarisation of carbon monoxide, A., 148.
- Mathews, D. M. See McLachlan, T.
- Mathews, W. B. See Standard Oil Co.
- Mathews, W. C. See Barnett, C. E.
- Mathias, E., the rectilinear diameter (critical temperature densities), A., 815.
- Mathias, H. R. See Standard Oil Co.
- Mathiesen, E. See Lunde, G.
- Mathiesen, H. A., solids-not-fat in cow milk and its relation to state and city minimum standards, B., 1019.
- Mathieson Alkali Works, and MacMullin, R. B., carbamates of the alkali metals other than potassium, (P.), B., 494.
- MacMullin, R. B., and McGready, W. K., carbamates of alkali and alkaline-earth metals, (P.), B., 226.
- Mathieson Alkali Works. See also Cunningham, G. L., Evans, G. S., Hecker, A. E., Labarthe, J., jun., MacMullin, R. B., Taylor, M. C., and Tressler, D. K.
- Mathieu. See Wilmet.
- Mathieu, F., absorption of hexose di- and mono-phosphate compared with other hexoses, A., 521. Production of calcæmia after intravenous injection of calcium gluconate in dogs with acute and chronic tetany, A., 1011.
- Mathieu, J. P., tartrates of bivalent metals, A., 315. Circular dichroism and some physico-chemical applications, A., 722. Dispersion of the double refraction of a muscovite, A., 1102. and Perrichet, J., rotatory dispersion of α -halogeno-camphors, A., 810.
- Mathieu, L., elimination of adventitious copper in grape musts and wines, B., 41. Industrial refrigeration of wines, B., 41.
- Mathieu, M., structure of cellulose dinitrate, A., 286. Structure of cellulose trinitrate, A., 434. Oils and plastic substances, B., 257, 833. See also Desmaroux, J.
- Mathieu-Lévy, (Mme.) L. S., adsorption of copper in ammoniacal solutions by precipitated ferric hydroxide, A., 819, 930.
- Mathis. See Volmar, Y.
- Mathur, P. N. See Duke, J. A. H.
- Matignon, C., and Dodé, M., crystallographic investigation of carbamide phosphate, A., 18. Carbamide phosphate, A., 72.
- Moureu, H., and Dodé, M., hydration of ethylene oxide, A., 63. Catalytic dehydration of butyl alcohol by alumina. I. Isomerisation of butenes. II. Determination and preparation of butenes, A., 958.
- Matishenko, O. A., determination of phosphorus in drinking water, B., 384.
- Matla, W. P. M., explosions of materials in factories and works, B., 1024.
- Matlack, M. B., pigments of pink grapefruits, *Citrus grandis*, L., Osbeck, A., 1040. Phytosterol and phytosterolin from the sweet potato, A., 1041. and Palkin, S., total neutral and unsaponifiable matter in rosin with data relative to mechanical methods for their determination, B., 1004.
- Matoba, K., influence of muscular work on urinary lipase, A., 110.
- Matolcsy, K., preparation and assay of preparations of cinchona bark, B., 700.
- Matossi, F., Rayleigh scattering in crystals, A., 146, 1445. and Brix, H., temperature variation of infra-red absorption of crystals. I. Fluorspar and calcite, A., 145. and Fesser, H., reflexion power of aqueous solutions in the infra-red, A., 1300. and Kindler, H., temperature variation of infra-red absorption of crystals. II. Sulphates and micas, A., 145.
- Matricon, M. See Trillat, J. J.
- Matson, J. R., and Hitchcock, F. A., basal metabolism in old age, A., 777.
- Matsuda, Sakaé, intensity modifications of helium spectral lines emitted by high-frequency excitation, A., 423.
- Matsuda, Sumio. See Ueno, Sei-ichi.
- Matsudaira, M., and Sato, A., effect of supersonic rays on enzymes. XLIII. Peroxidase reaction, A., 400.
- Matsui, Motooki, and Kizaki, K., mechanism of Kolbe's reaction. I. Electrolysis of free acetic acid, A., 45.

- Matsui, *Motolaro*, and *Oda, K.*, contact sulphuric acid manufacture. IV. Platinum catalyst on magnesium sulphate, B., 589.
- Oda, K.*, and *Naka, T.*, contact sulphuric acid manufacture. III. Silver-vanadium on silica gel, B., 492.
- Matsui, *T.* See *Tamaki, Masakatsu*.
- Matsumoto, *G.*, and *Matsuo, H.*, utilisation of fish oil. I. Deodorisation of fish oil, B., 109.
- Matsumoto, *H.* See *Ogura, T.*
- Matsumoto, *N.* See *Yoshida, U.*
- Matsumura, *K.*, nitration of 4:4'-dimethoxydiphenylmethane, A., 339. Friedel-Crafts reaction with 8-hydroxyquinoline, A., 500. Condensation of formaldehyde and monoketones. II., A., 622. Tetrahydro-*p*-phenanthroline, A., 631. Behaviour of β -*p*-dimethylaminobenzoin with alcoholic hydrogen chloride, A., 862. Oxime of β -*p*-dimethylaminobenzoin, A., 862. Sulphonation of acridone, A., 1380.
- Matsumura, *S.*, catalase in body-fluid of the silkworm, A., 1024.
- Matsunaga, *Y.*, net densities and X-ray investigation of carbon, B., 1079.
- Matsuno, *K.*, and *Han, K.*, Raman effect of organic substances. IV. Raman effect of cedrene, A., 1054.
- Matsuno, *T.*, and *Ichikawa, C.*, catalytic action of Japanese soils, B., 371.
- Matsuo, *H.* See *Matsumoto, G.*
- Matsuo, *Tetsunosuke*, salivary glands and calcium metabolism, A., 243. Calcium metabolism of the fetus, A., 243.
- Matsuo, *Toshizo*. See *Nuki, B.*
- Matsuoka, *K.* See *Nagai, S.*
- Matsuoka, *M.*, convulsions due to excessive dosage of biosterol, A., 129. Effect of intermittent and unequal supply of protein on nutrition of rats, A., 779.
- Matsuoka, *T.*, vitamin-C. VII. Germination of seeds. vi. Effect of light on production during germination. VIII. Chemical nature. i. Separation from cabbage juice. IX. ii. Vitamin-C and ether. X. iii. Narcotine and vitamin-C. XI. Physiological studies. i. Antiscorbutic value and method of administering. XII. Chemical nature. iv. Vitamin-C in the liver and adrenal of cattle. XIII. v. Extraction and solvents. XIV. vi. Extraction of vitamin-C and p_H value of the solution. XV. Physiological studies. ii. Antiscorbutic value and administration. XVI. Enzyme and vitamin-C. i. XVII. Chemical nature. vii. Change of content in barley, A., 1429.
- Matsushima, *K.* See *Gen. Electric Co.*
- Matsushita, *Y.* See *Nakashima, T.*
- Matsuura, *A.* See *Itano, A.*
- Matsuura, *S.*, compound of glucose and potassium chloride, A., 166.
- Mattacotti, *V.* See *Hill, G. A.*
- Mattekovich, *R. von*, [boiler] furnaces [for fuel of high moisture content], (P.), B., 659.
- Matteoli, *L.*, influence of small additions of cadmium on filler metal for copper-welding, B., 594.
- Matthew, *J. A.* See *Linen Industry Res. Assoc.*, and *Preston, M. H.*
- Matthews, *A. G.*, and *Lloyd, T. E.*, sheet material, (P.), B., 669.
- Matthews, *B. H. C.* See *Barcroft, J.*
- Matthews, *H. D.*, and *Chace Valve Co.*, W. M., bimetallic element, (P.), B., 314.
- Matthews, *J.*, microanalytical methods and their applications in industrial control, B., 177.
- Matthews, (Miss) *J. W.*, and *Briscoe, H. V. A.*, volatile solid filters for dust-sampling, B., 81, 209.
- See also *Briscoe, H. V. A.*
- Matthews, *V. J.*, *Newton, J. K.*, and *Bloor, W. R.*, lipins of the skin in experimental diabetes, A., 382.
- Matthies, *W.* See *Spengler, O.*
- Matthiessen & Hegeler Zinc Co. See *Bennett, T. H.*
- Matthijs, *C. J.* See *Keesom, W. H.*
- Matthijsen, *H. L.*, flow tests with paints containing zinc oxide, [raw] linseed oil, stand oil [and turpentine], B., 160. Critical oil content of linseed oil and linseed stand oil paints. II., B., 684. Comparison of methods of determining durability [of varnishes, etc.], B., 1004.
- Matti, *J.*, and *Barman, E.*, amino-alcohols having a secondary alcoholic function, A., 1362.
- Mattick, *E. C. V.* See *Golding, J.*
- Mattikow, *M.*, use of sintered glass discs in distillations, A., 599.
- See also *Clayton, B.*
- Mattill, *H. A.* See *Bradway, E. M.*, *French, R. B.*, *Schultz, H. W.*, and *Seegers, W. H.*
- Matting, *A.*, etching agent for coarse-structure investigation [of steel], B., 854.
- Mattis, *P. A.* See *Moerk, F. N.*
- Mattison, *E. L.* See *Du Pont de Nemours & Co., E. I.*, and *Holt, L. C.*
- Mattison, *W. T.* See *Mitchell, J. H.*
- Mattisohn, *M.*, naturally occurring fatty acids of high mol. wt. II. So-called cerotic acid of beeswax, B., 560.
- Mattox, *W. J.* See *Tropsch, H.*
- Mattson, *S.*, and *Csik, J. S.*, laws of soil colloidal behaviour. XVI. Cation exchange maximum in aluminosilicates, B., 740.
- and *Gustafsson, Y.*, chemical characteristics of soil profiles. I. Podsol, B., 964.
- and *Pugh, A. J.*, laws of soil colloidal behaviour. XIV. Electrokinetics of hydrous oxides and their ionic exchange, B., 36.
- See also *Joffe, J. S.*, and *Setter, L. R.*
- Mattsson, *E. J. M.*, coating iron or steel with aluminium or an alloy thereof, (P.), B., 1147.
- Matull, *E.*, magnetic double refraction of organic liquids, A., 149.
- Matuschka, *B.*, non-metallic inclusions in ferro-alloys, B., 594.
- Matusevitch, *V. V.*, contact neutralisation method in preparation of lubricating oils, B., 8.
- Matush, *M. A.* See *Archer, R. S.*
- Matuszak, *M. P.*, iodometric determination of phosgene, A., 53.
- Matveev, *G. P.* See *Iljinski, F. P.*
- Matzkevitch, *R. M.* See *Gabel, J. O.*
- Matzko, *S. N.*, vitamin-C content of dried onions, A., 417. Antiscorbutic properties of the turnip (*Brassica napus*), A., 1287.
- Matzner, *E.* See *Schuller, H.*
- Matzurevitch, *I. K.*, composition of the latex of *Asclepias cornuti* (*Syriaca*, L.), A., 1180.
- Maue, *A. W.*, surface waves in the electron theory of metals, A., 814.
- See also *Sommerfeld, A.*
- Mauer, *J. C.* See *Myers, R. P.*
- Mauersberger, *E. A.*, substances having wetting, washing, emulsifying, and similar properties, (P.), B., 585.
- Mauersberger, *H. R.*, rayon yarn conditioning, B., 488.
- Maughan, *F. B.*, control of onion thrips, B., 327.
- Maughan, *G. H.*, haemoglobin studies. I. In rachitic chickens: effect of ultra-violet irradiation, A., 1517.
- Maughan, *M.* See *Peterson, F. C.*
- Maulbetsch, *A.* See *Rutishauser, E.*
- Maume, *L.*, and *Dulac, J.*, importance of environment (climate and soil) in absorption of nitrogen, potassium, and phosphorus of wheats in similar physiological stages, B., 471.
- See also *Lagatu, H.*
- Maurer, *E.*, and *Bischof, W.*, distribution of phosphorus between metal and slag in the basic process of steel manufacture, B., 951.
- and *Gummert, H.*, structure and tensile properties of large forgings, B., 358.
- Klinger, *P.*, and *Fucke, H.*, determination of ferrous and manganous oxides in steel by means of mercuric chloride, B., 499.
- See also *Korschan, H.*
- Maurer, *K.*, and *Schiedt, B.*, synthesis of heterocyclic compounds from *o*-diamines and sugars, A., 224. Reactions between sugars and amino-acids. IV. Crystalline dipeptide-glucosides and influence of p_H on their fission, A., 332. New derivatives of dehydrodivanillin and catalytic reduction of nitrostyrenes, A., 1497.
- Schiedt, *B.*, and *Schroeter, H.*, application of carbohydrates to synthesis of heterocyclic compounds; glucosidone, hydroxyglucosidone, and their chemical behaviour, A., 1381.
- Maurer, *W.*, light-excitation in He by He atoms of 0 to 6000 volts energy, A., 1294.
- and *Wolf, R.*, helium fluorescence and collisions of the second kind of excited He atoms, A., 1.
- Mauric, *G.* See *Vallery-Radot, P.*
- Maurin, (Mlle.) *M.*, 4-hydroxy-2-methylquinoline and its derivatives, A., 1506.
- See also *Meyer, A.*
- Maust, *E. J.*, and *Dorr Co., Inc.*, cement, (P.), B., 1045.
- Mauthe, *J. L.*, and *Price, E. G.*, gas washer, (P.), B., 1027.
- Mauthner, *F.*, synthesis of homosyringic [4-hydroxy-3:5-dimethoxyphenylacetic] acid, A., 343. Preparation of methyl caffeate [3:4-dihydroxycinnamate], A., 343. Synthesis of glucocaffeic acid, A., 489. Synthesis of pyrogallol 3:5-dimethyl 1-propyl ether, A., 615.
- Mautner, *S.*, buffer action of soils, B., 198.
- Mautner-Markof, *A. von*. See *Kahn, P.*
- Mautz, *P. H.* See *Yant, W. P.*
- Maverick, *G. M.* See *Standard Oil Development Co.*
- Mavin, *C. R.* See *Haworth, R. D.*
- Mavor, *J. W.*, and *Thatcher, E. W.*, thyron control for incubators and water-baths, A., 1217.
- Mavrodineanu, *R.* See *Maxim, N.*
- Maw, *F. J.*, cell for optically examining or testing liquid, (P.), B., 658.
- Maw, *W. A.* See *Holcomb, R.*, and *Whitehead, W. E.*
- Mawhinney, *M. H.*, control of atmosphere in [ceramic] kilns, B., 851.
- Mawson, *C. A.*, influence of animal tissues on oxidation of ascorbic acid, A., 546.
- Max, *C. G. H.* See *Waterman, H. I.*

- Max, P., Schmeckebier, M. M., and Loeb, L., acquired resistance to the thyroid-stimulating and pseudo-lutcinising hormone of cattle anterior pituitary, A., 1424.
- Maxfield, F. A. See Ruark, A. E.
- Maxfield, L. S. See Newell, I. L.
- Maxim, N., and Aldea, G., action of organo-magnesium compounds on α -phenyl- β -2-furylacrylonitrile, A., 756.
- and Copuzeanu, unsaturated furan ketone derivatives, A., 626.
- and Mavrodineanu, R., Bouveault's method for preparation of aldehydes from organo-magnesium compounds and *N*-disubstituted formamides, A., 736.
- and Popesco, S., halochromy of compounds with a furan nucleus, A., 626.
- and Stancovici, N., α -phenyl- β -2-furylacrylic acid and its derivatives, A., 757.
- Maximoff, A. T. See Fabrice Riunite Industria Gomma Torino.
- Maximov, S. P., calculation of water-vapour corrections in determining calorific value of fuels, B., 389.
- Maximova, T. See Orékhov, A.
- Maxorov, B. V., and Adrianov, K. A., benzoylation of proteins as a method of obtaining lacquer resins, B., 1151.
- Maxted, E. B., and Moon, C. H., energetics of catalysis. IV. Influence of deactivation by heat treatment on activation energy. V. Temperature coefficient of hydrogenation processes, A., 589, 1210.
- See also Yorkshire Tar Distillers.
- Maxwell, L. C., quantitative and qualitative response to distributed dosage with gonadotropic extracts, A., 791.
- See also Bischoff, P.
- Maxwell, L. R., Jefferson, M. E., and Mosley, V. M., diffraction of electrons by single molecules, A., 18.
- Maxwell, W. R., and Partington, J. R., dissociation constants of polybasic acids, A., 934.
- May, A. See Conway, J. W.
- May, A. N. See Miller, H.
- May, C. J. See Docksey, P.
- May, E. See Biltz, W.
- May, F., galactogen. VII. Galactogen and glycogen contents of starved snails. VIII. Detection of galactogen in animals and man, A., 232.
- May, J. W. See Walters, O. S.
- May, L., periodic precipitates (Liebig rings), A., 1202.
- May, O. E. See Herrick, H. T., Lockwood, L. B., and Ward, G. E.
- May, R. M., reducing substances and chloride in the blood of *Orthoptera*, A., 1262.
- Mayberry, M. G., and Aston, J. G., vapour pressure of ketones, A., 290.
- See also Aston, J. G.
- Maycock, J. W. See Beaumont, G. E.
- Mayeda, S., feeding experiments with decomposition products of proteins. IV, A., 1272.
- Mayer, C. P., and Tessieri, I., ionic changes and urea in certain kidney and heart diseases; the acid-base equilibrium, A., 1402.
- Mayer, E. W. T., underglaze colours, B., 356.
- Mayer, F. See Nottbohm, F. E.
- Mayer, H., photo-effect with alkali metal films of atomic thickness on platinum, A., 909.
- Mayer, J. See Dziewoński, K.
- Mayer, J. E. See Sutton, P. P.
- Mayer, K. F., X-ray examination of turquoise, A., 842.
- Mayer, (Miss) M. G. See Herzfeld, K. F.
- Mayer, Nelicia, composition of altered glucose solutions, A., 734.
- Mayer, Nikolaus, extraction and preparation of petroleum asphalt, B., 757.
- and Oberle, A., cracking of hydrocarbon, (P.), B., 486.
- Mayer, R. M., spectral behaviour of methemoglobin, A., 563, 806.
- Mayers, H. H., and Röhm & Haas Co., anhydrous sodium sulphide, (P.), B., 269.
- Mayers, N. See Newton, W.
- Mayhew, R. L., pH of the digestive tract of the fowl, A., 1396.
- Maynard, E. J., phosphorus supplements in beet by-product rations, A., 654.
- Maynard, L. A. See McGay, C. M., Madsen, L. L., and Rottensten, K. V.
- Mayneord, W. V., physical basis of the biological effects of high-voltage radiations, A., 120.
- See also Cook, James Wilfred.
- Mayo, E. B., and O'Leary, W. J., oligonite, a manganosiderite from Leadville, Colorado, A., 60.
- Mayor, Y., naphthenic acids, B., 1036.
- Mayr, F. See Diemair, W.
- Mayr, J. K., excretory function of saliva, A., 378.
- Mayr, O. See Gen. Electric Co.
- Mayr, T. See Borger, G.
- Mayrhofer, A. [with Sommer, E.], simple method of determining refractive indices of liquids. II., B., 833.
- Mayton, E. L., pasture studies on upland soils, B., 373.
- Mazé, P., Mazé, P. J., jun., and Anxionnaz, R., variation in nutritive properties of skimmed milk with habituation to milk-assimilation, A., 242. Absorptive function of roots and concentration of culture media, A., 264.
- Mazé, P. J., jun. See Mazé, P.
- Mazee, W. M., determination of the dielectric constant of conducting solutions, A., 466.
- Mazel, V. A., and Goldberg, M. B., phosphorus oxychloride, B., 849.
- Manoilov, K. E., and Bernshtein, V. A., production of alumina by the method of "Näsaluminum," B., 802.
- Mazilu, N. See Angelescu, E.
- Mazoński, T., and Sucharda, E., preparation of benzenesulphonic acid, B., 137.
- See also Sucharda, E.
- Mazumdar. See under Majumdar.
- Mazur, H. See Harrow, B.
- Mazur, J. See Keesom, W. H., and Piekara, A.
- Mazurek, S., and Josse, Z., rubber mixture for Gordon Bennett Cup balloons, B., 144.
- Mazza, E., concentrating and separating components of gaseous mixtures, (P.), B., 290.
- Mazza, F. See Bacq, Z. M.
- Mazza, F. P., dehydrogenating action of the liver on some phenylaliphatic acids, A., 1274.
- and Cimmino, A., dehydrogenase activity of *B. coli communis* on higher aliphatic acids. II., A., 255. Oxidation of pyruvic acid produced by *B. coli*, A., 663.
- and Stolf, G., diffusion of dehydrogenase of higher fatty acids in different organs, A., 782.
- Mazza, F. P., and Zanfagna, R., oxidation of aceto-acetic acid produced by *B. coli*, A., 663.
- Mazza, L., sensitivity of chemical analysis with X-rays. I. Emission methods. II. Absorption methods, A., 1471.
- Mazzocco, P., chemical composition of quinoa, A., 391. Nutritive value of quinoa, A., 391. Determination of blood-indole, A., 1000.
- See also Houssay, B. A.
- Mazzucchelli, A., introduction of quantum periods into Mendeleef's table, A., 1295.
- Mazzucchi, M., anthrax vaccine, (P.), B., 1166.
- Mead, A., absorption spectra, in aqueous solution, of co-ordination compounds of chromium and cobalt, A., 10.
- Mead, F. C., jun., and Burk, R. E., thermal reactions of benzene, B., 539.
- Mead, S. See Dill, D. B.
- Mead, S. W., and Goss, H., ruminant digestion without roughage, B., 922.
- Mead, T. H. See Gulland, J. M., and Harington, C. R.
- Mead Corporation, and Carruth, H. P., paper, (P.), B., 669.
- O'Connor, J. J., mineral material for use in manufacture of paper, (P.), B., 541.
- See also Clark, J. d'A.
- Mead Research Engineering Co. See Traquair, J.
- Meadowcroft, N. F. See Beard, P. J.
- Meador, E. D. See Sohn, E.
- Means, J. H., and Lerman, J., harmonic symptomatology of the thyroid: to what extent is it explicable on the basis of altered metabolic rate? A., 1423.
- See also Salter, W. T.
- Mears, R. B., metallurgical factors influencing corrosion of iron and steel, B., 635.
- and Evans, U. R., "probability" of corrosion, A., 453.
- and Ward, E. D., apparatus for producing uniform scratches on metal surfaces, B., 65.
- Mease, R. T., determination of sulphur and sulphate in wool, B., 220.
- Analysis of mixtures of textile fibres, B., 986.
- and Jessup, D. A., analysis of textiles for cellulose acetate rayon, silk, regenerated cellulose rayon, cotton, and wool, B., 1038.
- Meaux, J., gyratory crushing mill, (P.), B., 929.
- Mebus, O. A. See Rogovina, P. V.
- Mechels, O., Eulan treatment of wool, B., 1090.
- Dierkes, G., Feller, E., and Rudolf, E., [textile] bleaching processes, B., 1090.
- Mecke, P., formation of oxychlorides rich in chlorine, B., 451.
- Mecke, R., infra-red photography and spectroscopic determination of [chemical] constitution, A., 912.
- and Vierling, O., absorption of simple substituted hydrocarbons in the near infra-red. I. Influence of state of aggregation; (gas-liquid comparison), A., 1444.
- See also Timm, B.
- Médard, L., Raman effect of binary mixtures of sulphuric and nitric acids, A., 281. Raman effect in nitromethane, A., 564. Effect of age on viscosity of collodion, B., 666.

- Médard, L., measurements on gelatinisation of nitrocellulose by four binary mixtures of the type alcohol-ether, B., 831.
- and Alquier, R., Raman effect of normal nonyl, decyl, and dodecyl nitrates, A., 429.
- and Friederich, gelatinisation of cellulose nitrate by amides and ketones, B., 666.
- Medes, G., determination of ascorbic acid in urine with phospho-18-tungstic acid, A., 1430.
- Evangelides, K., and Shinohara, K., neutral sulphur of urine; iodometric titration of ethyl sulphide, A., 380.
- See also Grant, W. T.
- Medick, H. See Fischer, H.
- Medina, F. A., and Clemente, A., physical properties of Philippine vegetable oils, B., 416.
- Medinski, C. B., and Balaban, P. I., combustion of low-grade sulphur ores of Schor-Su, B., 21.
- and Trusov, M. D., preparation of magnesium oxide from brine, B., 1141.
- Medlin, W. V., I-I linking in diphenyl-iodonium iodide, A., 917.
- Medlock, O. C., effect of different temperatures, humidities, and free ammonia on pecans in storage, B., 379.
- Medox, H. See Dodonov, J.
- Meduri, P. See Ricca, B.
- Medvedev, B. M. See Fattelberg, R. O.
- Medvedev, G. V. See Tschernoshukov, N. I.
- Medvedev, P. F., nettles of the U.S.S.R., their composition, distribution, and utilisation, B., 1061.
- Medvedev, S. See Abkin, A.
- Medvedeva, A. See Vesely, V.
- Meehan, O. L., rôle of fertilisers in pond-fish culture, B., 248.
- Meeker, D. R., and Jobling, J. W., arteriosclerotic lesions in the human aorta, A., 514.
- Meeraus, W. See Barrenscheen, H. K.
- Meerburg, (Miss) W. See Verkade, P. E.
- Meerschheidt-Hüllessem, J. von, modification of Bergmann-Junk-Mayrhofer stability test for smokeless powders, B., 607.
- Apparatus for observing development of brown fumes in smokeless-powder stability tests at 120°, 132°, and 135°, B., 1024.
- Thermostat for stability test of blasting gelatin, B., 1167.
- Meerwein, H. P. See Karrer, P.
- Meerson, E. A. See Rivkin, S. M.
- Mees, A. M., relative value of several methods of determining durability [of varnishes], B., 960.
- See also Dantuma, R. S., and Maas, C. F. H.
- Mees, C. E. K., photographic plates for use in spectroscopy and astronomy, B., 525.
- Mees, E., volumetric determination of glucose in urine, A., 1525.
- Meetham, A. R., and Dobson, G. M. B., vertical distribution of atmospheric ozone in high latitudes, A., 600.
- Megalokonomos, J. See Galatis, L., and Panopoulos, J.
- Megaw, H. D., cell dimensions of ordinary and "heavy" ice, A., 151.
- See also Bernal, J. D.
- Meggers, W. F., infra-red arc spectrum of iron, A., 423.
- Infra-red spectra of noble gases (10,500–13,000 Å.), A., 1045.
- Meggers, W. F., and Scribner, B. F., second spectrum of hafnium (Hf II), A., 137.
- Multiplets and terms in first two spectra of niobium, A., 907.
- Méhes, J. von. See Jeney, A. von.
- Mehl, J. W., and Schmidt, C. L. A., conductivities of aqueous solutions of glycine, *dl*-valine, and *l*-asparagine, A., 584.
- Mehl, R. F., theoretical metallurgy during 1934, B., 553.
- and Gensamer, M., X-ray study of Lüders' lines and strain figures in low-carbon steel, B., 807.
- McCandless, E. L., and Rhines, F. N., orientation of oxide films on metals, A., 161.
- See also Barrett, C. S.
- Mehlhorn, K. See Müller, Erich.
- Mehlich, A., Fred, E. B., and Truog, E., *Cunninghamella* plaque method of measuring available phosphorus in soil, B., 198.
- Mehlig, J. P., determination of magnesium as magnesium ammonium phosphate hexahydrate, A., 1093.
- Spectrophotometric determination of manganese in steel, B., 272, 1047.
- Mehlitz, A., beer, (P.), B., 121.
- and Maass, H., determination of pectolytic activity of filtration enzymes, A., 1415.
- Enzymic clarification of fruit juices and sweet musts. III. Spontaneous clarification and clarification with filtration enzymes. IV. Influence of tannins on the pectolase action of filtration enzymes, B., 376.
- Mehmel, M., structure of halloysite and metahalloysite, A., 571.
- Mehner, V., and Rostler, S. F., recovering organic compounds from waste products of sulphuric acid refining of mineral oil or wax, (P.), B., 56.
- Mehrle, R., alterations in colour between thick-juice and molasses, B., 201.
- Mehrlieh, F. P., mechanism for controlled continuous flow of nutrient solutions, A., 1043.
- Mehta, D. N., and Jatkar, S. K. K., valve potentiometer, A., 320.
- pH of lead solutions, A., 1203.
- Antimony electrode, A., 1218.
- pH control of rotary drilling fluids, B., 837.
- Mehta, R. J. See Dastur, R. H.
- Mehta, S. See Mitra, S. M.
- Mehta, S. M., and Joseph, (Miss) O., viscosity of titanium dioxide sol in presence of electrolytes, A., 1459.
- See also Nadkarni, D. R.
- Mei, C., excretion of sodium salicylate, A., 1159.
- Meichsner, A. See Roth, W. A.
- Meldinger, W., photographic development, A., 712.
- Meier, A. See Bartling, F.
- Meier, C. A., and Wyler, O., Widmark's alcohol determination, A., 729.
- Meier, P. W., and Stuckert, L., silicic acid and silicates. IV. Determination of silicic acid in insoluble silicates, A., 719.
- Meier, H. F. See Skau, E. L.
- Meier, O. See Honcamp, F.
- Meier, Otto, blackening of photographic plates by slow electrons, A., 311.
- Meier, R., and Ballowitz, K., significance of coupled reactions of low aliphatic compounds for carbohydrate and fat degradation, A., 241.
- See also Ballowitz, K.
- Meigs, E. B., and Converse, H. T., vitamin-A in nutrition of dairy cattle, A., 668.
- Turner, W. A., Kane, E. A., and Shinn, L. A., effects on calcium and phosphorus metabolism in dairy cows of feeding low-calcium rations for long periods, A., 1409.
- Meigs, F. M. See Du Pont de Nemours & Co., E. I.
- Meigs, J. V., and Plastix Corp., resinous product, (P.), B., 816.
- and Sweets Labs., Inc., condensation products of carbohydrate derivatives, (P.), B., 1056.
- Meigs, Bassett & Slaughter, Inc. See Bodenstein, P. H.
- Meihuizen, J. J. See Keesom, W. H.
- Meijer, J., thermal analysis and cutectics of medicinal mixtures, B., 923.
- Meijer, T. M. See Gorter, E.
- Meikle, A. A. See King, L. A. L.
- Meiklejohn, A. P. See Johnson, R. E.
- Meincke, E. R., Cox, R. F. B., and McElvain, S. M., cyclisation of α -ethanedimalonic esters by sodium ethoxide, A., 961.
- and McElvain, S. M., acetoacetic condensation. X. Condensation of ethyl α -carbethoxy- α -ethyladipate, A., 1224.
- Meinel, K., reaction of bromine with ethylene derivatives in methyl alcohol. II., A., 603.
- Meinhard, P., centrifugal machines [pumps] with hollow impellers, (P.), B., 788.
- Meisel, K. See Biltz, W., Hulsman, O., and Weibke, F.
- Meisenheimer, H. See Fischbeck, K.
- Meisenheimer, T. B., and Celanese Corp. of America, tinting of [cellulose ester or ether] yarn, (P.), B., 449.
- Meisse, L. A., and Ohio Brass Co., welding rod, (P.), B., 29.
- Meissner, A., insulators of high thermal conductivity, B., 363.
- Meissner, B. See Viehl, K.
- Meissner, G. See Hesse, E.
- Meissner, H. See Meyer, Julius.
- Meissner, J., lead azide, B., 334.
- Meissner, K. L., [corrosion of] duralplat, B., 553.
- Meissner, K. W., selenium arc spectrum, A., 799.
- Meissner, W., superconductivity, A., 154.
- Steiner, K., and Grassmann, P., effect of kinks in wires on the occurrence of superconductivity, A., 1196.
- Meister, M. See Freudenberg, K.
- Meister, R. See Rieche, A.
- Meitina, V. N. See Nikiforov, E. A.
- Meitner, L., transmutation of elements by neutrons, A., 7.
- See also Hahn, O.
- Meitzner, E. See Mosettig, E.
- Meixner, J., some conclusions from the Born-Schrödinger electron radius, A., 1050.
- See also Bechert, K.
- Meker, G. See Cournot, J.
- Mekler, L. A. See Universal Oil Products Co.
- Melchers, L. E., and Brunson, A. M., effect of chemical treatments of seed maize on stand and yield in Kansas, B., 326.
- Meldrum, A. N., and Bhatt, D. M., chloralides of α -hydroxycarboxylic acids, A., 328.
- and Parikh, P. H., synthesis of *m*-hemipinic acid, A., 619.
- Synthesis of phenylacetic acids from gallic acid and its methyl esters, A., 619.

- Meldrum, A. N., and Vaidyanathan, K. S., synthesis of substances related to cochenillic and carminic acids, A., 748.
- Meldrum, N. U., and Tarr, H. L. A., reduction of glutathione by the Warburg-Christian system, A., 249.
- Melrose, E. See Bähne, H.
- Melhuish, R. R. See Hill, D. W.
- Melichar, M., analysis of preparations of the type of aromatic tinctura of iron and arsenic, B., 429.
- See also Štěrbá-Böhm, J. S.
- Melikova, O. S. See Starik, I. E.
- Mell, C. D., basic dyes from lichens, B., 762.
- Mell, C. W. See Metzger, F. W.
- Mellanby, J., supposed coagulation of oxalate plasma by trypsin, A., 771.
- Mellanby, M., and King, J. D., diet and nerve supply to dental tissues, A., 382.
- Mellander, O., combination of cholesterol in blood-serum, A., 770.
- Meller, H. B., air pollution [by smoke], B., 976.
- Mellers, E. V. See Brit. Celanese.
- Mellersh-Jackson, L., treatment of cyanide solutions containing precious metals, (P.), B., 810.
- Mellet, D. S. See Tarte, C. E.
- Mellis, O. See Straumanis, M.
- Mellon, A. F., taste and odour control [in water] at Minneapolis, Minnesota, B., 127.
- Mellon, M. G., and Kasline, C. T., solutions for colorimetric standards. IV. Ferric chloride, A., 835.
- Mellor, A. See Brit. Celanese.
- Mellor, G. A. See Jenkins, C. H. M.
- Mellor, D. P. See Dwyer, F. P.
- Mellor, J. W., crazing and peeling of glazes, B., 405. Durability of pottery frits, glazes, glasses, and enamels in service, B., 405.
- Melmore, A. L. See Melmore, W. M.
- Melmore, W. M., and Melmore, A. L., emulsifying apparatus, etc., (P.), B., 883.
- Melnick, D., and Cowgill, G. R., alleged autohydrolysis of vegetable ivory, A., 1042.
- Melnikov, N. N., determination of copper in organic compounds, A., 186. Aliphatic nitro-compounds. III. Reactions of nitromethane halides, A., 470. Carbonic acid derivatives. VII. Interaction of water, ammonia, sodium hydroxide, and magnesium ethyl bromide with alkyl trichloromethyl carbonates, A., 471. Action of magnesium phenyl bromide on dichloriodoaryl compounds, A., 1113.
- See also Namestkin, S. S.
- Melnikova, V. F. See Tscherkess, A. I.
- Melnischenko, I. D. See Goldstein, B.
- Meloche, F. W. See Clifton, L. E., and Freeman, S. E.
- Melon, J., analysis and optical properties of thoreaulite, A., 841.
- Melot, G. J., effect of deuterium oxide on respiration of germinating seeds, A., 552.
- Melton, R. L., Brownell, K. W., and Easter, G. J., effect of moisture on electrical resistance of embedding cements, B., 407.
- Melville, H. W., kinetics of reaction between hydrogen and nitrous oxide. II. and III. Effect of oxygen, A., 40. Photochemical oxidation of phosphine above the upper explosion limit, A., 47.
- See also Gray, S. C.
- Melville, J., labile glutamine peptides, and origin of ammonia set free during enzymic digestion of proteins, A., 404.
- and Richardson, G. M., titration constants of amides and dipeptides in relation to alcohol and formaldehyde titrations of amino-N, A., 170.
- Melville, R., water content and assimilation of seedling tomato plants, A., 549.
- See also Bolas, B. D.
- Melville, W. See Pirie, W. B.
- Melvin, W. S. See Du Pont de Nemours & Co., E. I.
- Melzer, C. G. R., concentration of precious-metal ores by froth flotation, (P.), B., 999.
- Memminger, K. See Fahlberg-List A.-G. Chem. Fabr.
- Menard, D. F. See Aston, J. G.
- Menck, W. J. See McJunkin, F. A.
- Mendeleeff, P., coagulating action of juice of embryonic guinea-pig tissues, A., 375. Specificity of coagulating power of embryonic guinea-pig tissues, A., 375. Coagulant action of tissue extracts in cancerous guinea-pigs, A., 514. Trepheones and hormones of embryonic tissues, A., 668.
- Mendels, S. See Cruess, W. F.
- Mendelsohn, I. W., sanitation in a Russian industrial city, B., 527.
- Mendelsohn, K., and Babbitt, J. D., magnetic behaviour of superconducting tin spheres, A., 1309.
- and Moore, J. R., superconducting alloys, A., 816. Specific heat of a superconducting alloy, A., 1312.
- See also Keeley, T. C.
- Mendez, R., standardisation of extracts of adrenal cortex, A., 539.
- Mendivelzua, G. See Deulofeu, V.
- Mendlina, N. G., determination of tannides by azotisation with diazotised amines, and determination of sulphite-cellulose tannides in mixtures with vegetable tannides, B., 419.
- Mendoza, M. See Imperial Chem. Industries.
- Ménégaux, G., and Odiette, D., influence of metallic couples on growth *in vitro* of fibroblasts and osteoblasts, A., 1021.
- Meneghetti, E., modern chemotherapy of antimony and biological problems of specificity and resistance, A., 657.
- Meng, C. Y., Anderson, P. A., and Hsieh, Y. M., ionisation of hydrogen in contact with platinum, copper, and nickel, A., 1068.
- Meng, H. M., and Chang, K., molybdenite-quartz veins of Shih-ping-chuan, Tsing-tien, Chekiang, A., 190.
- Mengelkoch, K., temperature variation of the breaking [tensile] strength of glass rods, B., 1142.
- Menken, J. G., vitamin-A and carotenoid content of human serum and milk, A., 1427.
- Menkin, I. See Povarin, G.
- Menkin, M. F. See Menkin, V.
- Menkin, V., Wolbach, S. B., and Menkin, M. F., formation of intercellular substance by administration of ascorbic acid in experimental scurvy, A., 888.
- Menkina, R. See Scheloumova, A.
- Menkovski, M. A. See Rabschinski, I. V.
- Mennie, J. H. See Horn, W. R.
- Menon, B. K., synthesis of α -naphthol-2:4-dicarboxylic acid, A., 1237.
- and Peacock, D. H., rates of racemisation of acids of the type $\text{CHRR}'\text{CO}_2\text{H}$, A., 1083.
- Menon, B. K. See also Burjorjee, H. R., and Peacock, D. H.
- Menon, K. N. See Rao, U. S. K.
- Menon, S. R. K., variation in methoxyl and cellulose values of fibre of the fruit of *Cocos nucifera* during growth, A., 549.
- Menshikov, G., alkaloids of *Heliotropium lasiocarpum*. III. Hydroxyheliotridane. IV. Degradation of heliotridane to a pyrrole base, A., 995, 1255.
- Menschikova, V. N. See Sadikov, V. S.
- Mensdorf, L. See Weygand, C.
- Mentrup, A., ionic rays, A., 682.
- Menusan, H., jun. See Dills, L. E.
- Menzel, D. H. See Russell, H. N.
- Menzel, H., boric acids and alkali borates. V. Transition of sodium borate pentahydrate into decahydrate. VIII. (Addendum); system $\text{B}_2\text{O}_3\text{-H}_2\text{O}$, A., 313, 1333.
- [with Schulz, H., Sieg, L., and Voigt, M.], boric acid and alkali borates. IX. System $\text{Na}_2\text{B}_4\text{O}_7\text{-H}_2\text{O}$, A., 1333.
- Menzel, O., significance of the formol-protein number in valuation of malt, B., 519.
- Menzel, T. F., transparent film, (P.), B., 668.
- Menzies, A. C., and Mills, H. R., Raman effect and temperature. I. Ammonium chloride, bromide, and iodide, A., 564.
- Menzies, R. C., even and odd co-ordination numbers, A., 15. Problem of valency, A., 431.
- Menzies, W. C., apparatus for separating materials of different sp.gr., (P.), B., 1075.
- Menzinsky, G., influence of hydrogen sulphite solutions on xylose, A., 847. Influence of hydrogen sulphite solutions on mono- and di-hydroxyacetone at raised temperature, A., 963.
- Mercelis, J., manufacture of white Portland cement in a rotary kiln, (P.), B., 102.
- Mercer, D., Robertson, A., and Cahn, R. S., picrotoxin. I. Constitution of picrotic acid and the C-skeleton of picrotoxinin and picrotin, A., 1236.
- Mercia, P. D., precipitation-hardening [in metals and alloys], B., 312.
- Mercier, A., expression of the second law of thermodynamics in terms of Clif-ford's numbers, A., 1454.
- See also Saini, H.
- Mercier, F., and Balansard, J., constituents of rhizome of *Cimicifuga racemosa*, A., 673.
- and Delphand, J., papaverine and blood-sugar, A., 642.
- Mercier, R., paramagnetism of the cobalt ion in very dilute solutions, A., 573.
- Mercier, W. C., and Amer. Hatters & Furriers Co., fur-treating [carroting] composition and process, (P.), B., 145.
- Merck, E., refining of tunny fish-liver oil, (P.), B., 1003.
- Merck, F. See under Merck, E.
- Merck, K. See under Merck, E.
- Merck, L. See under Merck, E.
- Merck, W. See under Merck, E.
- Merck & Co., Inc. See Cline, J. K., Jones, L. W., and Major, R. T.
- Merckel, J. H. C., surface tension of homologous series, A., 697. Viscosity of electrolytes in aqueous solution and the lyotropic numbers, A., 1318.
- Merco Centrifugal Separator Co. See Peltzer, A.
- Merejkowsky, B. See Guillaumin, C. O.
- Merewether, E. R. A., risks in the rubber industry, B., 1058.

- Mergenthaler Linotype Co. See Olson, *C. B.*
 Merica, *P. D.*, age-hardened steel, B., 904.
 Meritt, *K. K.* See Davidson, *L. T.*
 Merkel, *A.*, thorium content of pitch-blendes from Great Bear Lake, N.W.T., Canada, A., 469.
 Merkulova, *M. S.* See Nikitin, *B. A.*
 Merkurova, *M. S.* See Turova, *M. B.*
 Mermod, *C.*, synthesis of 1-methylphenazine, A., 630.
 and Dock, *W.*, fragility and maturation of reticulocytes, A., 507. Colloidal dye effective in treating pernicious anemia and evoking reticulocytosis in guinea-pigs, A., 1268.
 Merrell Co., *W. S.* See Rider, *T. H.*
 Merriam, *E. S.*, preformed abrasives, (P.), B., 101.
 Merriam, *H. F.* See Gen. Chem. Co.
 Merriam, *M. K.* See King, *H. S.*
 Merrick, *J.* See Lucas, Ltd., *J.*
 Merrill, *D. R.*, and Union Oil Co. of California, production of insecticides and wood preservatives, (P.), B., 1159.
 See also Bray, *U. B.*, and Union Oil Co. of California.
 Merrimac Chemical Co., removal of iron from solutions of aluminium sulphate, (P.), B., 948.
 See also Healy, *J. J., jun.*, and Wilson, *W. S.*
 Merritt, *C. W.*, series of raw leadless glazes at low temperatures, B., 767.
 Merritt, *M. H.*, Koons, *G. I.*, and Western Gas Construction Co., carburetted water-gas, (P.), B., 213.
 Merritt, *M. M.*, Poor, *N. H.*, and Tanning Process Co., treatment of hides and skins, (P.), B., 323.
 See also Connor, *J. H.*, and Tanning Process Co.
 Merritt, *R. S.* See Aluminium, Ltd.
 Merry, *E. W.*, comments on Thuau wear-resistance machine [for sole leather], B., 371.
 See also Marriott, *R. H.*
 Merryweather & Sons, Ltd., Osborne, *J. H.*, and Miller, *Leonard C.*, fire-extinguishing foam, (P.), B., 482.
 Merson, *F. S.* See Finkelstein, *L. O.*
 Mertens, *E.* See Hanack, *B.*
 Mertens, *W. K.* See Veen, *A. G. van.*
 Mertzlin, *R. V.*, application of surface tension to physico-chemical analysis, A., 599. Position of region of non-miscibility of binary systems in surface tension-concentration diagrams, A., 928. Physico-chemical nature of binary liquid mixtures at the lower critical temperature, A., 928.
 Merwin, *H. E.* See Greig, *J. W.*
 Merz, *A. R.* See Ross, *W. H.*
 Merz, *K. W.*, and Schmidt, *G.*, poisonous constituents of seeds of *Tephrosia vogelii*, A., 221.
 Merzbach, *P. F.*, chemical change of plasma-albumins in carcinoma, A., 381.
 Merzlikin, *F.*, Farberov, *M.*, and Poloskin, *E.*, non-adhesive liner for the tyre industry, B., 468.
 Meschkova, *N. P.*, and Severin, *S. E.*, electrodialysis as method of separation and determination of bases in biological fluids. II. Determination of total bases in blood, serum, and erythrocytes, A., 230.
 Meschter, *H. F.* See Du Pont de Nemours & Co., *E. I.*
 Meschtscherjakov, *A. P.* See Petrov, *A. D.*
 Meshnikova, *T.* See Sakostschikov, *A. P.*
 Mesnage, *P.*, molecular emission spectra of some metallic salts, A., 1051, 1187.
 Mesnil, *L.*, and Marcel, *C.*, destruction of root-ly on endives, B., 472.
 Mesrobian, *L.* See Boivin, *A.*
 Messenger, *T. H.*, rubber in relation to foods and beverages, B., 563.
 and Porritt, *B. D.*, tests on crêpe rubber for shoe soles, B., 241.
 Messerly, *G. H.* See Aston, *J. G.*
 Messerschmidt, *W.*, and Tartler, *G.*, examination by a radioactive method of quantitative analysis of small amounts of lead, A., 720.
 Messimy, *R.* See Debré, *R.*
 Messina, *R.*, modifications of phosphorus, sodium, and nitrogen-exchange in blood in renal and thyroid deficiency, A., 108. Capillaroscopy and acid-base equilibrium in mental work, A., 109. Protein exchange in relation to hepatic function, A., 237.
 Messina, *M.*, and Coppo, *M.*, relations between hormones and vitamins; action of antirachitic vitamin in the organism with reference to physio-pathology of the thymus, A., 1034.
 Messkin, *V. S.*, copper-containing steels for dynamos and transformers, B., 855.
 and Somin, *B. E.*, properties of nickel-aluminium magnet steel, B., 310.
 Messner, *E.*, influence of temperature on conductivity of milk, A., 234.
 Mészáros, *G.*, effect of breed on weight and composition of hens' eggs, B., 378. Emulsifiability of foodstuff fats, B., 731.
 Métadier, *J.*, effect of magnetic field on Brownian movement, A., 31.
 Metal Co., *S. & T.*, lead-alloy bearing metal, (P.), B., 956.
 Metal Finishing Research Corporation, phosphate coatings on iron or steel, (P.), B., 810.
 See also Tanner, *R. R.*
 Metal & Thermit Corporation. See Brown, *G. H.*, and Corson, *M. G.*
 Metallgesellschaft Akt.-Ges., rotary drum furnaces, (P.), B., 49, 929. Burning of low-grade fuels, especially refuse, (P.), B., 55. Utilising heat of furnace gases from pyrites burners, (P.), B., 148. Roasting of ores, (P.), B., 234. Recovery of sulphur and sulphuretted hydrogen, or mixtures of sulphuretted hydrogen, sulphur dioxide, and sulphur, from materials containing sulphur [e.g., pyrites or anhydrite], (P.), B., 495. Recovery of phosphorus from gases, (P.), B., 495*. Refining of vegetable and animal oils and fats, (P.), B., 561. Concentrating or enriching rubber latex, (P.), B., 738. Refining of vegetable and animal oils and fats, and recovery of solvents used in such process, (P.), B., 774. Gas of high calorific value, (P.), B., 890. Recovering sulphur dioxide from refuse sulphuric acid, (P.), B., 900. Operation of rotary drum furnaces, (P.), B., 906. Recovery of sulphuric acid by condensation, (P.), B., 947. Condensation of sulphuric acid from moist gases containing sulphur trioxide, (P.), B., 948. Concentration of [rubber] lattices, (P.), B., 1104. Halogenation products of rubber and similar substances, (P.), B., 1105.
 and Blei- & Silberhütte Braubach G.m.b.H., refining of molten zinciferous lead, (P.), B., 66.
 Metallgesellschaft Akt.-Ges., and Jaenicke, *J.*, improving the properties of rubber latex, (P.), B., 1058.
 and Schlippenbach, *F. (Baron) von*, rotary-hearth furnaces, (P.), B., 657.
 and Schmidt Ges.m.b.H., *K.*, removing hard spots from thermally reduced aluminium-silicon hardeners, (P.), B., 414.
 and Schober, *O.*, [metallic] paints, (P.), B., 914.
 and Wendeborn, *H.*, blast-roasting or sintering of fine materials, (P.), B., 503.
 See also Comp. Gén. d'Electrometall.
 Metallics & Non-Metallics, Ltd. See Bart-ram, *V. T.*
 Metallisation, Ltd., and Ballard, *W. E.*, therapeutical application of metals [zinc], B., 174.
 Metalnikov, *N.*, bactericidal action of water exposed to combined action of metallic silver and electrolysis, A., 1170.
 Metcalf, *G. F.* See Gen. Electric Co.
 Metcalfe, *J. E.*, carboniferous rocks, A., 1346.
 Metlitzkaja, *R. A.* See Tzuckerman, *B. I.*
 Metlitzki, *L. V.* See Zerevitinov, *S. F.*
 Metz, *C. F.* See Böeseken, *J.*
 Metz, *F.* See Fichter, *F.*
 Metz, *L.*, testing stability of smokeless powders by measurements of p_H , B., 255.
 Metzger, *F. J.*, [the rare gases], B., 305.
 and Air Reduction Co., Inc., purification of gases [deodorising carbon dioxide], (P.), B., 100.
 Metzger, *F. W.*, Meulen, *P. A. van der*, and Mell, *C. W.*, relation of sugar content and odour of clarified extracts of plants to their susceptibility to attack by the Japanese beetle, A., 797.
 Metzger, *W. H.*, relation of varying rainfall to soil heterogeneity as measured by crop production, B., 646. Residual effect of lucerne cropping periods of various lengths on yield and protein content of succeeding wheat crops, B., 1110.
 Metzinger, *E. F.*, lacquer solvents, B., 598.
 Metzl, *Z.*, extraction of oleaginous materials rich in oil or otherwise unsuitable for treatment by ordinary methods, (P.), B., 238.
 Metzner, *P.*, metabolic changes in geotropically stimulated seedlings, A., 264.
 Meulen, *H. ter*, molybdenum content of sound and carious teeth, A., 1004. Methods of chemical analysis by hydrogenation, A., 1516.
 and Ravenswaay, *H. J.*, molybdenum content in leaves, A., 552.
 Meulen, *J. B. van der*, relation between phenomenon of cation exchange with silica-alumina complexes and their crystal structure, A., 293.
 Meulen, *J. H. van der*, permanganometric investigations. II., A., 55.
 See also Duintjer Wilkens Meihuizen & Co. N. V.
 Meulen, *P. A. van der*. See Metzger, *F. W.*
 Meulengracht, *E.*, presence of anti-anemic factor in preparations of dried stomach from cardia, fundus, and pyloric regions, A., 107.
 Meunier, *E.*, and Schweikert, *E.*, action of nitrous acid on collagen: properties of deaminised collagen, B., 864.
 Meunier, *L.*, and Audry, *P.*, liming of ossein, B., 1007.

- Meunier, L., and Chambard, P., the "first bath" of the two-bath chrome-tanning process, B., 600.
- Meunier, M., and Andriot, J., continuous current amplifier for microphotometric registration, A., 9.
- Meunier, P., determination of small quantities of aluminium in complex media; application to plants, A., 186.
- Meunsen, A. [with Degel, G.], esters of thio-sulphurous acid, $\text{H}_2\text{S}_2\text{O}_2$, A., 326.
- Meures, K. See Dietzel, A.
- Meurice, R., and Martens, P., determination of nitrates, A., 595.
- Meuser, L., and Naugatuck Chem. Co., preparation of ketone-amine [condensation products], (P.), B., 841.
- Meuwssen, A., and Gebhardt, H., fission of ethyl thiosulphite $\text{S}_2(\text{OEt})_2$, A., 845.
- Mevis, A. See Breckpot, R.
- Mevius, W., behaviour of illuminated [plant] leaves in carbon dioxide-free air, A., 1038.
- Meyer, light-weight concrete from blast-furnace slag, B., 726.
- Meyer, A., and Maurin, (Mlle.) M., reactions of 4-hydroxy-2-methylquinoline, A., 758.
- Meyer, D. See Bömer, A.
- Meyer, D. B., sericite, A., 955.
- Meyer, E. (Stuttgart). See Grube, G.
- Meyer, Ernst, action of caffeine-containing and caffeine-free coffee on basal metabolism, A., 1155.
- Meyer, E. H. L., Kerr constants and the Raman effect, A., 565.
- Meyer, F. See Hartmann, F. K.
- Meyer, Fritz. See under *Chemische Fabrik L. Meyer*.
- Meyer, Fritz (Köln), determination of gaseous pressures and their fluctuations in the organism. I. Micromethods for alveolar air, blood, and tissues in man. II. Mechanism of intermediary gaseous metabolism, A., 507.
- Meyer, F. H. See Finn, J., jun.
- Meyer, F. W., "IIa carbonation" [of sugar juice], B., 200.
- Meyer, Gerrik, and Ghijsen, W. L., jun., determination of small quantities of oxygen in gases, B., 724.
- Meyer, Gerrik (Delft), and Scheffer, F. E. C., equilibrium $\text{Sn} + 2\text{H}_2\text{O} \rightleftharpoons \text{SnO}_2 + 2\text{H}_2$, A., 583.
- Meyer, G. M. See Levene, P. A.
- Meyer, H., steel having less tendency to blue-fracture and brittleness due to ageing, (P.), B., 66.
- Meyer, H. G., esterification of fats, B., 1149.
- Meyer, H. H., relationship between Widmark's " β " and " τ " factors in rabbits and the action of alcohol on body oxidations and a comparison of the blood-alcohol and -sugar curves, A., 525.
- Meyer, H. J. See Nolte, E.
- Meyer, H. K. See Scholl, R.
- Meyer, Ingrid. See Roth, W. A.
- Meyer, Irmgard. See Albers, H.
- Meyer, Jacob. See Necheles, H.
- Meyer, Jacques. See Sartory, A.
- Meyer, Jules. See Ruzicka, L.
- Meyer, Julius, molecular strength of liquids, A., 820. Velocity of hydrolysis of dithionie acid, A., 828. *cis*-Cinnamic acids, A., 1363.
- and Hoehne, K., quantitative micro-analytical determination of metals in complex salts, A., 319. Complex salts of bivalent cobalt, A., 594. Micro-analytical determination of platinum metals in simple and complex salts, A., 1474.
- Meyer, Julius, and Meissner, H., titanium alum, A., 942.
- and Pfaff, W., crystallisation of melts. II. and III., A., 811, 1449.
- and Taube, W., organic vanadium compounds, A., 627.
- Meyer, J. W. See Ornstein, L. S.
- Meyer, Karl (Mülheim), and Horn, O., reaction of carbon monoxide and hydrogen in coke-oven gas with molybdenum catalysts, B., 390.
- See also Fischer, F.
- Meyer, Karl (New York), and Palmer, J. W., polysaccharide of vitreous humour, A., 232.
- Meyer, K. H., and Ferri, C., elasticity of caoutchouc, B., 563.
- Ferri, C., and Hohenemser, W., elasticity of rubber, B., 643.
- and Go, Y., X-ray observations on lower and higher polypeptides, A., 152.
- Fibrous sulphur and its fine structure, A., 285.
- and Hemmi, H., theory of narcosis, A., 779. Narcosis. III., A., 893.
- and Hohenemser, W., vulcanisation reactions, A., 1349.
- and Lühdemann, R., behaviour of compounds of high mol. wt. in solution. I. Vapour pressure lowering and osmotic pressure, A., 579.
- and Pankow, G. W., constitution and structure of chitin, A., 753. Tri-phosphonitrilic chloride, A., 1450.
- and Wyk, A. van der, properties of higher polymerides in solution. II. Viscosity of solutions of aliphatic hydrocarbons, A., 1318.
- Meyer, Lothar. See Boersch, H., and Martin, H.
- Meyer, Ludwig, preparation and use of humus-clay mixtures as carriers of plant nutrients and for soil improvement, B., 821.
- and Rennenkampff, U. von, behaviour of small amounts of phosphate fertiliser in soils of different composition, B., 602.
- See also under *Chemische Fabrik L. Meyer*.
- Meyer, O., and Schulte, F., equilibrium $\text{FeS} + \text{Mn} \rightleftharpoons \text{MnS} + \text{Fe}$ at high temperatures, B., 229.
- See also Eilender, W.
- Meyer, O. O., McTiernan, C., and Salter, W. T., utilisation of simple derivatives of sugars by mouse sarcoma, A., 514.
- Meyer, P., colloid osmotic pressure of the blood of seafish, A., 1516. Colloid osmotic pressure of nutrient liquids of the marine invertebrates, A., 1524.
- See also Lumière, A.
- Meyer, R. (Berlin). See Günther, P.
- Meyer, Reinhard. See Diels, O.
- Meyer, Richard, spark-spectrographic detection of iron in animal tissues, A., 377.
- Meyer, R. E., action of Grignard salts on hydroxymethylene ketones, A., 329. Hydroxymethylene ketones and their reaction products. II. Removal of water from readily decomposed sec. and tert. alcohols. III. Syntheses in the terpene and sesquiterpene series. IV. Action of organomagnesium compounds on salts of hydroxymethylene ketones. V. Hydrolytic fission of double linkings conjugated with the carbonyl group. VI. Proof of $\alpha\delta$ -addition of Grignard salts to the conjugated double linkings of hydroxymethylene ketones. VII. Synthesis of an isomeride of iron, A., 609, 733, 751.
- Meyer, R. J. See Baxter, G. P.
- Meyer, R. K., and Gustus, E. L., refractoriness to ovarian stimulation in the Rhesus monkey, A., 666.
- See also Cartland, G. F.
- Meyer, Theodor, and Hüttig, G. F. [with Hnevkovsky, O., and Kittel, H.], active oxides. LXXXV. Intermediate steps in the transformation of a mixture of magnesium oxide and chromic oxide into magnesium chromite, A., 944.
- See also Hüttig, G. F.
- Meyer, Thérèse, breakdown and conductivity in thin layers of liquids, A., 683.
- Meyer, V., cellulose-decomposing, sporing bacteria of the groups *Bacillus omelianski* and *B. macecrans*, A., 898.
- Meyer, W. See Ruschmann, G.
- Meyer, Wa (Königsberg). See Sonn, A.
- Meyer, Walter, differences in alcohol values of pharmaceutical tinctures, B., 123. Testing fire-proofing media for wood, B., 727.
- Meyer, W. G. See Asher, A. L.
- Meyer, W. R., rapid determination of nickel and chlorides in nickel-plating solutions, B., 192. Electrolytic cleaning and pickling, B., 460. Analysis of plating solutions and deposits, B., 1050.
- Meyer, W. W. See Klinefelter, T. A.
- Meyeren, W. von, electrical clean-up of gases at low pressures. II., A., 4.
- Meyerhof, O., relationships between chemical and physical processes in muscular contraction, A., 109. Kinetics of reversible reaction between hexosediphosphoric acid and dihydroxy-acetonephosphoric acid, A., 897. Reversible reactions in biological glycolysis, A., 1151. Reaction chain of alcoholic fermentation, A., 1538.
- and Kiessling, W., phosphorylated intermediate product of carbohydrate fission and its enzymic equilibrium, A., 250. Isolation of isomeric phosphoglyceric acids (glyceric acid-2- and -3-phosphoric acid) from fermentation solutions and their enzymic equilibrium, A., 659. Enzymic conversion of glyceraldehyde into dihydroxyacetone-phosphoric acid, A., 1164. Velocity of fermentation of sugar by zymase and origin of the first fermentation equation of Harden and Young, A., 1164. Enzymic reactions with synthetic phosphopyruvic acid (enolised phosphopyruvic acid), A., 1418.
- and Lohmann, K., enzymic equilibrium reaction between hexosediphosphoric acid and dihydroxyacetonephosphoric acid. IV., A., 403.
- and Schulz, W., reduction of nitric oxide by oxidising enzymes, A., 248.
- Meyers, E. L. [with Hopkins, B. S.], rare earths. XLIII. I. At. wt. of europium. II. Sp. gr. of europium chloride, A., 425.
- Meyers, S. L., effect of steam treatment on thermal expansion of hardened neat cements, B., 271. Variations in thermal-expansion coefficients of Portland cements, B., 725.
- Meyersberg, G., position of cast iron on scale of tensile strengths, B., 309.
- Meyling, A. H., adipic acid as a volumetric standard, A., 462.
- Meythaler, F., protective action of adrenaline, A., 900.

- Meythaler, F., and Kleineidam, E., fall in blood-sugar in men after intravenous administration of insulin, A., 901.
- and Seefisch, H., mechanism of alimentary hyperglycemia. I. Blood-sugar after oral and intraduodenal glucose administration. II. Rate of absorption of glucose in the small intestine. III. Sugar content of blood in vessels after intraduodenal glucose administration, A., 1016.
- and Wossidlo, K., adrenaline content of the blood and variations in blood-sugar, A., 900.
- Mezey, K. See Staub, H.
- Mezger, R., removal of carbon monoxide from [town's] gas, B., 884.
- Mezhebovskaia, E., preparation of higher alcohols from petroleum products, B., 392.
- Mezincesco, M., value of non-essential amino-acids in covering endogenous nitrogen metabolism, A., 1272. Utilisation of amides in nitrogen metabolism, A., 1407.
- See also Terroine, E. F.
- Mezzadrol, G., and Amati, A., action of the blood and variations produced by *Aspergillus niger*, A., 898.
- and Sgarzi, L., action of alkaloids on pure cultures of *B. radicola*, A., 1031.
- "Miag" Mühlenbau & Industrie Akt.-Ges., extraction apparatus, (P.), B., 610.
- Mialki, W. See Wiedmann, G.
- Micamold Radio Corporation. See Bergstein, M., and Sklar, H. L.
- Micgovski, L. See Arzimovitch, L.
- Michael, A., and Carlson, G. H., mechanism of reactions of ethyl acetoacetate, the enolates, and structurally related compounds. I. C- and O-Alkylation. II. Reaction of sodium enolates with acyl chlorides, A., 474. Mechanism of nitration process, A., 1103.
- Michael, S., respiration and metabolism of moulds, A., 254. Substitutes for common salt, (P.), B., 226.
- Michaelian, M. B., and Hammer, B. W., acetyl methylcarbinol and diacetyl in dairy products, B., 521.
- Michaelis, L., chemistry of alcoholic fermentation, B., 1015.
- and Runnström, J., inactivation and regeneration of glycolytic enzyme system of muscle extract, A., 1536.
- and Smythe, C. V., influence of sodium thioglycollate on glycolytic enzyme system of muscle extract, A., 1418.
- See also Bjerrum, J., and Runnström, J.
- Michaelis, M. See Adler, Erich.
- Michaelis, R. See Kögl, F., and Schönberg, A.
- Michaels, J. J., and Searle, O. M., calcium contents of cerebrospinal fluid, blood-serum, and serum ultrafiltrate: its relation to clinical findings in eighty psychiatric patients, A., 1402.
- Michail, D., and Rusu, L., effect of diets low or high in chloride on sodium chloride content of tears, A., 378.
- and Vancea, P., action of induced fever on lachrymal elimination of sodium chloride, A., 394. Action of ovarian hormone on lachrymal elimination of sodium chloride, A., 1034.
- Michailenko, G. See Tschesnokov, N.
- Michailov, A. See Arbusov, G.
- Michailov, B. M. See Zelinski, N. D.
- Michailov, G. See Frederiks, V.
- Michailov, V. J., influence of washing on light sensitivity of silver halide emulsions, B., 525.
- Michailova, N. F., optimum temperature of anthracene oil used for removing naphthalene from coke-oven gas, B., 979.
- Michalev, P. F., periodic phenomena in colloidal systems, A., 1321.
- and Schemjakin, P. M., emission wave theory of periodic reactions. V. Study of periodic reactions by methods of physico-chemical analysis, A., 453.
- Michalova, H. See Rehnbinder, P. A.
- Michalowski, E., and Bielinski, Z. M., effect of hypertonic solutions of sodium chloride on elimination of pigments by the kidney, A., 1148.
- Michalski, E., purification of solvents for conductivity determinations, A., 304.
- Michaud, F., thermodynamical theory of solutions, A., 446.
- Michaux, A., chlorine and phosphorus contents of brains of normal and starved guinea-pigs and of those suffering from chronic and acute scurvy; magnesium content of striated muscle, A., 238.
- Michael, F., and Hasse, K., structure of partly substituted sorbitols, A., 1222.
- and Horn, K., fermentable diketose, 5-ketofructose (5-fructonose), A., 200.
- Ruhkopf, H., and Suckfüll, F., transformation of hexoses into inositol, A., 1225.
- and Schulte, W., ascorbic acid (vitamin-C) and hydroxytyronic acid, A., 1106.
- Micheev, V., effect of neutralisation of sheep pelts after pickling on chrometanning process, B., 863. Influence of neutralisation of sheep skins after chrome tanning on dyeing of its flesh side, B., 863. Effect of type of tanning on uniformity of colour of the flesh side of dyed sheep skins, B., 1008.
- Micheeva, V. I. See Pogodin, S. A.
- Michel, A., and Bénard, J., formula of ferromagnetic chromic oxide, A., 834.
- and Chaudron, G., influence of magnetisation while hot and of crystallisation on shape of thermomagnetic curves, A., 1063.
- and Girard, A., detection of dilute solid solution formation with iron oxides by means of thermomagnetic analysis, A., 1067.
- Michel, L. P., treatment of waste-water in sulphur-black dyeing, B., 542. Action of alkalis on viscose silk, B., 623.
- Michel-Durand, E., phosphorus metabolism in leaves of mistletoe, A., 265.
- Michel-Lévy, A. See Muraour, H.
- Micheli, P. L., percentage of nitrogen in tissues in the rat treated with thyroxine, A., 540.
- Michelitsch, W. See Galle, E.
- Michelman, J., causes of deterioration of white upper leather, B., 1009.
- Michels, A., and Lenssen, M., electric manometer for pressures up to 3000 atmospheres, A., 58. Influence of pressure on electrical resistance of hard-drawn gold wire in different stages of annealing, and of soft gold wire, A., 1062.
- Sanders, P., and Schipper, A., dielectric constant of hydrogen at pressures up to 1425 atm., and at temperatures of 25° and 100°, A., 1192.
- Michels, F., potential dissociation effect, A., 825.
- Michels, J., mixing machine, (P.), B., 1075.
- Michelson, N. See Borsuk, V.
- Michiels, L., and Tougarinov, B., preparation and analysis of arsenic trisulphide, B., 671.
- Michigan Steel Casting Co. See Summers, B. S.
- Michigan University. See Blicke, F. F.
- Michinaka, H. See Goto, K.
- Michnovska, L. See Sakmin, P. K.
- Michot-Dupont, G. F., and Physical Chemistry Res. Co., deriving liquid hydrocarbons from solid carbonisable materials, (P.), B., 983.
- Mid-Continent Petroleum Corporation. See Bennett, H. T.
- Middleboe, K., drying and heating materials, (P.), B., 49.
- Middelburg, H. A., influence of lime status of volcanic Merapi ash soils on quality of Vorstenland tobacco, B., 647.
- Middleton, A. W., effect of salts on determination of traces of lead by chromat method, A., 317.
- and Ward, A. M., composition and properties of precipitated nickel and cobalt sulphides. I., A., 1471.
- Middleton, G. J., microscopical study of Russian chinaware, B., 804.
- Middleton, H., tests for elements in organic compounds, A., 639.
- Middleton, H. E., Slater, C. S., and Byers, H. G., physical and chemical characteristics of soils from erosion experiment stations. II., B., 71.
- Midgley, T., jun., and Gen. Motors Corp., chemistry; [fractional distillation], (P.), B., 883.
- Miège, E., manuring of soils in dry climates. VI. Morocco, B., 515.
- Miehan, E. J., absorption spectrum of Eu^{+++} in crystalline $\text{Eu}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O}$, A., 1443.
- Miele Printing Press & Manufacturing Co., lithographic printing, (P.), B., 961.
- Miehr, W., quartz, felspar, and clay as materials in chemical industry, B., 61.
- Miekeley, A., and Schuck, G., apparatus for volumetric determination of water intake of leather, B., 420.
- Mieller, H., properties of fats of invertebrate animals, B., 68. Determination of m.p. [of fats and oils], B., 416.
- Miernik, S. See Swientoslawski, W.
- Miescher, E., molecular spectra of boron and aluminium halides, A., 144.
- See also Wehrli, M.
- Miesowicz, M., influence of a magnetic field on viscosity of *p*-azoxyanisole, A., 1198.
- Miesse, R. E., and Gen. Scientific Corp., electrode for luminous positive-column gaseous-conducting devices [neon tubes], (P.), B., 507. Permanent-colour gaseous-conduction tube, (P.), B., 911.
- Mietheke, M., and Finzenhagen, H., micro-determination of potassium in milk and milk products, B., 204. Micro-methods in milk analysis. III. Micro-determination of potassium in milk and products, B., 825.
- Migal, P. K., heat of adsorption of vapours from a current of air by active charcoal at 24°, A., 930.
- Migeon, G., water content and dehydration of sepiolites, A., 468. Volume variation and modification of lattice of sepiolites as a function of temperature, A., 726.
- See also Longchambon, H.
- Migeot, H. See Leroy, M.

- Migliavacca, A., regression of histo-pathological modifications of the pituitary from castration, obtained with the new sex-hormone extracted from male urine, A., 1285.
- Migray, E. von, determination of water, A., 1336.
- Migridchian, V., Horsfall, J. L., and Amer. Cyanamid Co., cyanamide seed disinfectant, (P.), B., 328.
- Miguelote-Vianna, M. See Vellard, J.
- Mihailceanu, G. See Gavrilă, I.
- Mihăilescu, C., Balaban, I., and Schöbesch, O., effect of gases used in war on food-stuffs and water, B., 526.
- Mihalovici, A., and Ullmann, L. von, iodobismuthates of quinine and hydrocupreine esters, A., 874.
- Miholić, S. S., mineral water of Očeslavei, A., 468. Iodine mineral waters in Jugoslavia, A., 840, 841. Analysis of water of the Velika thermal spring, A., 1219.
- See also Holste, A.
- Mihul, C. See Ionescu, T. V.
- Mika, J., micro-alkalimetry. II. Micro-determination of alkali carbonates, A., 836. Micro-alkalimetric studies. I., A., 1337.
- Mikawa, T., p_H of umbilical blood of the human new-born, compared with maternal blood, A., 509.
- Mikei, A. J., rational classification of silicates, A., 953. Chemical and physico-chemical properties of Dniepropetrovsk glauconites, A., 1221.
- Mikei, I. J., and Brodska, I. A., dilatometric study of natural silicates, A., 953.
- Mikeska, L. A. See Baldeschwieler, E. L.
- Mikhailov, N. I. See Buizov, B. V.
- Mikkelsen, E. See Lundø, G.
- Miksch, E. See Leitgeb, W.
- Mikulowski-Pomorski, J., and Porowski, S., influence of distribution of potash fertilisers on their action in pot cultures, B., 966.
- and Salcewicz, J., use of sodium nitrate and ammonium sulphate in conjunction with different proportions of potash fertilisers on soil which reacts strongly to potassium, B., 966.
- and Wojtyśiakowa, M., influence of magnesium and sodium on action of potash fertilisers, B., 966.
- Mikumo, J., soap solutions. X. Composition of bubbles of mixed solutions, B., 275.
- Milanov, L. K., welded aluminium bus-bars, B., 1049.
- and Shvartzman, E. M., tests of non-graphitic linings [for the Hall cell], B., 1052.
- Milar, K. A., [asphaltic] coating material, (P.), B., 278.
- Milas, N. A., and McAlevy, A., syntheses with ionones. I. Synthesis of an alcohol related to vitamin-A, A., 611.
- and Walsh, W. L., catalytic oxidations. I. Oxidations in the furan series, A., 1246.
- See also Walsh, W. L.
- Milatz, J. M. W., and Ornstein, L. S., electronic excitation function of the metastable s_2 level of neon, A., 675.
- Milbauer, J., oxidation of carbon disulphide by Kjeldahl's method, A., 588. Rapid oxidation of organic substances with sulphuric acid, A., 1210. Case of negative photocatalysis, A., 1468.
- and Doškař, J., wet preparation of calcium chromate, A., 1088.
- Milbauer, J., and Kröhn, B., photographic sensitometry, B., 830.
- Milbery, J. E. See Raiford, L. C.
- Milburne, J. D., poisoning by benzol or coal-tar hydrocarbons, B., 752.
- Milby, T. T., determination of ash content of leg bones of chicks with slipped tendon, A., 1520.
- See also Henderson, E. W.
- Mildner, T. C. See Standard Telephones & Cables.
- Milella, A., protein-synthesising function of the liver, A., 1407.
- Miles, F. D., relation between density of blackening and X-ray intensity for characteristic copper radiation and Agfa-Laue film, A., 1331.
- Miles, F. T., comparison of viscosity data, A., 692.
- Miles, H. J. See Rudolfs, W.
- Miles, H. W., control of flea-beetles with a naphthalene-silica dust, B., 282. Plum-frost sawfly and its control, B., 603.
- Milford, M., Bracey, R. J., Cunnoid, F. A., and Egerton, A. C., precision optical pyrometers, A., 598.
- Milgram, E. J. See Goldstein, B.
- Milhorat, A. T., liver-arginase in myasthenia gravis; origin of creatine, A., 1527.
- and Wolff, H. G., creatine metabolism in muscle disease, A., 383.
- Milhoud, A., e.m.f. produced by flow of water vapour, A., 707.
- Milkovskaja, L. B. See Arzibischev, S. A.
- Milkowski, K. See Terlikowski, F.
- Milla, E., reabsorption of pancreatic enzymes after ligation of the ducts, A., 533.
- Miller, R. W. See Bataafsche Petroleum Maats.
- Miller, W. M., micro-nephelometry and its application to irradiated living tissues, A., 422.
- Millars' Machinery Co., Ltd. See Hodgson, C. G.
- Millat, L. See Raymond-Hamet, M.
- Millener, W. H. See Thermal Industrial & Chem. (T.I.C.) Res. Co., Ltd.
- Miller, A. B., and Armstrong Cork Co., linoleum, (P.), B., 599.
- Miller, A. C. See Breakey, E. P.
- Miller, B. L., and Breerwood, C. H., flotation processing of limestone, B., 304.
- Miller, C. A., Karns, C. B., and Valvoline Oil Co., solid lubricant, (P.), B., 760.
- Miller, C. C., heavy alloy iron castings, B., 904.
- Miller, (Miss) Christina C., rate of transformation into methylcarbamide of methylammonium cyanate dissolved in ethyl alcohol, A., 1208.
- Miller, Clarke C. See Standard Oil Co. of Indiana.
- Miller, C. D. See Hamre, C. J.
- Miller, C. H. See Bloomfield, G. F.
- Miller, C. W., linear photo-electric densitometer, A., 722.
- Miller, D., determination of [milk] curd tension by use of hydrochloric acid-pepsin coagulant, B., 873.
- Miller, D. G. See Wells, H. S., and Youmans, J. B.
- Miller, D. K., and Rhoads, C. P., presence in egg-white and in rice-polishing concentrate, low in vitamin-B₂, of an anti-pernicious anaemia principle, A., 885. Experimental production of loss of haematopoietic elements of the gastric secretion and of the liver in swine with achlorhydria and anaemia, A., 1400.
- Miller, D. K. See also Rhoads, C. P.
- Miller, D. S. See Steck, I. E.
- Miller, E., Munch, J. C., and Crossley, F. S., thiobarbiturates, A., 1155.
- Miller, E. B., Connolly, G. C., and Hockley, C. F., refrigeration process, (P.), B., 1121.
- Connolly, G. C., and Silica Gel Corp., refrigeration process, (P.), B., 338.
- Miller, E. G., jun. See Eastman, I. M.
- Miller, E. H., and Leeson, W. S., cadmium-ising steel wool, (P.), B., 811.
- Miller, E. J. See Winter, O. B.
- Miller, Ernest John, basic amino-acids of typical forage-grass proteins, A., 1433.
- Miller, E. P. See Lark-Horowitz, K.
- Miller, E. S., determination of common carotenoids; analyses of β -carotene and leaf-xanthophyll in thirteen plant tissues, A., 551. Purification of common carotenoids and quantitative measurement of their absorption spectra, A., 738.
- and Burr, G. O., carbon dioxide balance [in plants] at higher light intensities, A., 904.
- MacKinnon, G., and Zscheile, F. P., jun., absorption spectra of α - and β -carotenes and lycopene, A., 1189.
- Miller, F., jun., simplification of Bragg's formula for diffraction of X-rays by a perfect crystal, A., 433.
- Miller, F. M., and Lyons, R. E., colour reactions of amino-acids with phenols and hypochlorites; new tests for tryptophan and phenylalanine, A., 370.
- Miller, F. S., anorthite from California, A., 726.
- Miller, F. W., Kampf, H. E., and Cole, D. L., weighting of silk, (P.), B., 450.
- Miller, G. E. See Johnston, W. R.
- Miller, G. L. See Wren, H.
- Miller, H., Duncanson, W. E., and May, A. N., disintegration of boron by α -particles, A., 277.
- Miller, H. F., and Bachman, G. B., higher benzenoid hydrocarbons; syntheses with the aid of metallo-derivatives, A., 741.
- Miller, H. G., effect of cottonseed meal on stability of vitamin-A in cod-liver oil, B., 476.
- Miller, J., evaporators, (P.), B., 788.
- Miller, J. D., metals and alloys in pulp and paper industry, B., 153.
- Miller, J. G., dielectric behaviour of germanium tetrachloride, A., 13.
- Miller, K. See Lyman, K. E.
- Miller, L., and Deglon, C. R., physical properties of deposited metal in the arc-welding and atomic hydrogen processes, B., 857.
- Miller, Leonard C. See Merryweather & Sons, Ltd.
- Miller, Lloyd C. See Cartland, G. F.
- Miller, L. F. See Coventry, F. L.
- Miller, L. P., effect of halogenated aliphatic compounds on respiration of potato tubers, A., 794.
- See also Denny, F. E.
- Miller, Martin. See Eibner, I.
- Miller, Max. See Niklas, H.
- Miller, M. O., and Heath, R. L., natural-colour photoplate, (P.), B., 382.
- Miller, M. W., and Bearse, G. E., phosphorus requirements of laying hens, B., 522.
- Miller, N. C. E., toxic value of *Derris* spp., B., 576.
- Miller, N. F., and Case, L. O., kinetics of the alkaline hydrolysis of ethyl carbonate and of potassium ethyl carbonate, A., 828.

- Miller, N. J., and Steinberg, D. S., layer-like magnetisation in magnetite crystals, A., 1309.
- Miller, O., and Piaux, L., Raman spectra of the isomeric *cis*- and *trans*-1:3- and 1:4-dimethylcyclohexanes and of 1:1-dimethylcyclohexane, A., 1054.
- Miller, O. O. See Cook, W. S.
- Miller, P. von. See Lüers, H.
- Miller, R. A., and Pittsburgh Plate Glass Co., grading of finely-divided material [*e.g.*, sand], (P.), B., 83.
- Miller, R. C. See Forbes, E. B., and Kriss, M.
- Miller, R. F., effect of a grain boundary on deformation of a single crystal of zinc, A., 433.
See also Bartz, Q. R.
- Miller, R. L., Bassett, I. P., Thompson, W. L., and English, L. L., effect of calcium hydroxide on composition of Conner, Valencia, and Satsuma oranges, B., 373.
- Bassett, I. P., and Yothers, W. W., effect of lead arsenate insecticides on citrus fruits, B., 423. Iron sulphate and other materials for increasing the effectiveness of sulphur insecticides on citrus trees, B., 423.
See also Yothers, W. W.
- Miller, R. M., electrometallurgy of cadmium as applied to electrolytic zinc-plant purification residues, B., 502.
See also Clemmensen, E.
- Miller, R. P., the building code and raw materials of construction, B., 1096.
- Miller, R. R. See Davis, R. O. E.
- Miller, R. W. See Standard Oil Development Co.
- Miller, S. C., and Frankfort Distillery, ageing and colouring of whisky, (P.), B., 970.
- Miller, S. E. See Lauer, W. M.
- Miller, S. P. See Barrett Co.
- Miller, V. See Oldright, G. L.
- Miller, W. B., and Oxweld Acetylene Co., arc-welding electrode, (P.), B., 1001.
- Miller, W. E. See Jones, G. W.
- Miller, W. Lash, Wildier's bios, A., 405.
- Miller, Walter Leslie, and Smith & Co., Ltd., H. V., material suitable for expansion joints for concrete and for other purposes, (P.), B., 675.
- Miller, W. T., and Kerslake, J. E., colour and odour removal [from water supply] at Ossining, New York, B., 527.
- Miller & Co., Inc., M. B., refining of mineral oil and preparation of lubricating oil, (P.), B., 136.
and Tuttle, M. H., refining of mineral oil and preparation of lubricating oil, (P.), B., 346.
See also Carpenter, I. C.
- Millet, R. F. See Pollack, H.
- Millett, S. See Jenkins, G. L.
- Millican, T., Bannister, H. W., Liverpool Borax Co. (1933), Ltd., Robinson, R. B., and Irving, G. S., [trap device for] collection and removal of impurities in water, or other substances in steam generators and other liquid containers, (P.), B., 258.
- Milligan, J. C. See Arnot, F. L.
- Milligan, L. H., abrasive products in the building industry, B., 1094.
- Armitage, D., and Norton Co., ceramic bonded abrasive article, (P.), B., 1095.
- and Ridgway, R. R., impact abrasion hardness of moulded boron carbide and of some cemented tungsten and tantalum carbides, B., 1094.
- Milligan, W. O. See Weiser, H. B.
- Millikan, R. A., cosmic rays, A., 560.
- Milliken, M. G. See Hercules Powder Co.
- Millin, D., assay of chromite, B., 905.
- Millis, W. T. See Westinghouse Electric & Manuif. Co.
- Millman, J., electronic energy bands in metallic lithium, A., 560.
- Millner, T. See Gen. Electric Co.
- Mills, E. V., nature and amount of colloids present in sewage. V. Electrical and surface properties. VI. Colloids in waste waters from beet-sugar factories, B., 207, 976.
- Mills, H. R. See Hankins, G. A., and Menzies, A. C.
- Mills, J. E., high vacua, B., 177.
See also Lunt, R. W.
- Mills, L. E. See Dow Chem. Co.
- Mills, M. W. See Mills & Co. (Engineers), Ltd., J.
- Mills, P. A., zinc pellets for generation of arsine in the Gutzeit method, A., 1215.
- Mills, W. H., and Quibell, T. H. H., configuration of valencies of 4-covalent platinum; optical resolution of *meso*-stilbenediaminobutylendiaminoplatinous salts, A., 1057.
See also Maitland, P.
- Mills & Co. (Engineers), Ltd., J., Mills, M. W., and Bolton, J. F., removal of floating scum, etc., from the surface of sludge-settling tanks used in treatment of sewage, (P.), B., 784.
- Milne, G., suggested units of classification and mapping, particularly for East African soils, B., 1059.
- Milne, S., and Sonder, K., [Fourdrinier machine for] production of paper, (P.), B., 185.
- Milner, R. L., solubility of gold in ferric sulphate and its geological applications, A., 928.
- Milner, R. T. See Sando, C. E., and Southard, J. C.
- Milobedzki, T., centigram (semi-micro-) analysis of inorganic substances. I, A., 1095.
and Szczypinski, W., carbonate error in acidimetry, A., 315.
- Milone, M., Raman effect of aliphatic ethyl ketones, A., 281. Raman spectrum of esters of derivatives of β -keto-butyric acid. I and II, A., 281, 1054. Electric moment of derivatives of the heterocyclic ring C_2N_2O , A., 684. Dioximes. CVII., A., 684.
and Müller, G., constitution of the heterocyclic [ring] C_2N_2O , A., 810.
- Milovidova, A., and Glazunova, Z., sources of error in determination of phosphorus in iron and steel, B., 64.
- Milovidova, A. L., rapid method of filtration, B., 385.
- Milovidova, N. V. See Rapoport, I. B.
- Milton, C., jarosite in tuff from Potosi, Bolivia, A., 726.
- Milton, R. See Obermer, E.
- Milton, W. E. J., effect of controlled grazing and manuring on natural hill pastures, B., 167.
See also Fagan, T. W.
- Miltschitzky, G. See Ruff, O.
- Minaev, B. A., electrometric determination of total acidity of intensely coloured solutions by the Bucharov-Evstigneiev method, A., 52.
- Minagawa, T., amylosynthase. II. Rice amylosynthase. XXI.—XXIII. XXIV. Reaction velocity. III., A., 249, 533, 1162.
- Minakov, V. A. See Komar, N. P.
- Minatoya, S., and Kurahashi, K., pulverisation of rubber by use of soya-bean lecithin and applications of the products, B., 113.
and Nagai, I., analysis of hexamethylenetetramine, B., 181.
- Nagai, I., and Aoe, I., modification of Vollhard's method of determining free sulphur in vulcanised rubber; determination in commercial mercapto-benzothiazole, B., 162.
- Minatoya, T., haemoglobinuria caused by injection of haemoglobin, A., 879.
- Mindlin, S. S., Zeldovitch, P. J., Kaplan, M. J., Kuzmina, L. I., and Remennikova, V. S., nitrocellulose for light-stable celluloid, B., 1136.
- Mine, K., organic magnesium compounds. I. Reaction between phenyl *p*-toluenesulphonate and magnesium phenyl bromide in various solvents, A., 739.
- Miner, C. S., Ericson, R., and Nat. Vermiculite Products Corp., expanded vermiculite manufacture, (P.), B., 899.
- Mineralite Corporation. See Kitsee, I.
- Minerals Separation, Ltd., flotation concentration of minerals, (P.), B., 29, 506.
and Williams, P. T., washing of coal, (P.), B., 212.
- Minerals Separation North American Corporation. See Chapman, G. A., Keller, C. H., and Tucker, S.
- Mines Domaniales de Potasse d'Alsace. See Walter, J.
- Mineshita, T., lu-jung, the Chinese drug. I, B., 1023.
- Minett, F. C., Wooldridge, C. H., and Sheather, A. L., so-called sewage poisoning in cattle, B., 1168.
- Ming, S. Y. See Chi, Y. F.
- Mingasson, G., and Delarue, H., safety apparatus for water pump, A., 467.
- Mingoia, Q., synthesis of pyrrole alcohols, A., 1378.
- Minina, E. G., influence of method of distributing fertilisers on quality and yield of wheat grain, B., 689.
- Minina, H. See Sabinin, D.
- Miniovitch, M. A. See Libinson, I. M.
- Minkow, I. See Lachs, H.
- Minkowski, R., intensity distribution in pressure-broadened spectral lines, A., 555.
and Bruck, H., intensity distribution of spectral lines excited in molecular rays, A., 1045. Intensity distribution of the red cadmium line excited by electron collision with molecular rays, A., 1045. True and apparent width of spectral lines, A., 1046.
- Müller, H. G., and Weber-Schäfer, M., transition probabilities for the *D* lines of sodium from absolute intensity measurements, the dissociation of sodium salts, and the half width of the *D* lines in the luminous gas-air flame, A., 675.
and Weber-Schäfer, M., transition probability for $2P-1S$ of sodium from absolute intensity measurements of flames, A., 675.
- Minne, R. See Dulière, W. L.
- Minnesota Metallurgical Co. See Popham, W. J.

- Minnesota Mining & Manufacturing Co., adhesive for coating, penetrating, sizing, priming, or waterproofing a base or backing, and for bonding grit to a base or backing to form an article in the nature of a flexible waterproof abrasive, (P.), B., 242. Adhesives [containing rubber] and adhesive sheets or tapes employing same, (P.), B., 686. Adhesives, (P.), B., 686. Adhesive films, sheets, strips or tapes, (P.), B., 799. Adhesive sheets or tapes, (P.), B., 800.
- and Carlton, R. P., abrasives [e.g., emery paper], (P.), B., 1095.
- and Drew, R. G., packaging material, (P.), B., 799. Adhesive films, sheets, strips or tapes, (P.), B., 799.
- Minor, C. A., and Minor, J. E., stiffness testing of paper, B., 623.
- Minor, H. R., and Liquid Carbonic Corp., sponge rubber, (P.), B., 369. [Cellular] heat-insulating material [containing rubber], (P.), B., 386.
- Minor, J. E., chemical control in paper manufacture, B., 58.
- See also Minor, C. A.
- Minot, A. S., Dodd, K., and Saunders, J. M., acidosis of guanidine intoxication, A., 894.
- Minouchi, T., and Schwalm, H., effect of progynon on regeneration of erythrocytes, A., 1034.
- Minovici, S., and Vanghelovici, M., [physiological effects of] cholesterol, A., 1155.
- Minsk, L. M. See Eastman Kodak Co.
- Mintchev, I. See Ouzounov, G.
- Mintz, I. B., and Krasilshchikov, B. E., clarification of [beet] juice by the W.N.J.S. method, B., 1063.
- Minz, B., and Paic, M., spectrographical study of biochemical reactions of nerves, A., 1003.
- See also Binet, L.
- Mir-A-Col, Inc. See Jirousek, J. F.
- Mirëev, A., possibility of presence of heavy water in [beet] sugar industry, B., 75.
- See also Sandera, K.
- Mirer, E. See Lutenberg, C.
- Mirimanoff, A., ψ -growth-factors of grape must, A., 1539.
- and Perrottet, E., determination of amino-acids of blood-serum with tyrosinase, A., 1517.
- See also Cherbuliez, E., and Chodat, F.
- Mirkin, I. A. See Isgarishev, N. A.
- Mirlas, L. I., action of strong and weak bases on cellulose nitrate. II. Solvation of the polymeric-homologous series of cellulose nitrates treated with ammonia, A., 701. Determination of relative mol. wts. of the members of polymeric-homologous series of cellulose derivatives, A., 849. Stability of sodium cellulose xanthate solutions. I. Action of cations of different valency, B., 587.
- See also Danilov, S. N.
- Mirlas, L. V., influence of an axial magnetic field on the discharge density in mercury vapour at low pressures, A., 1046.
- Mirlis, D. I., and Gorocholinskaja, M. S., hydrolysis of wood for furfuraldehyde production, with subsequent saccharification of the remaining cellulose, B., 795.
- See also Strelnikov, A. N.
- Mironesco, A., and Ioanid, G., reactions of β -ketonic esters containing the furan nucleus, A., 1503.
- Mirsky, A. E., and Anson, M. L., thiol and disulphide groups of proteins. I. Determination, A., 506.
- Misch, L., two intermetallic compounds of beryllium and iron, A., 816. Structure of intermetallic compounds of beryllium with copper, nickel, and iron, A., 926.
- Mischkis, M., effect of diet on nitrogen and phosphorus compounds of muscles during fatigue. I. Effect on muscle-creatine and -phosphagen of albino rats, A., 1521.
- See also Fomin, S. V.
- Mischnaevskaja, M. M. See Lopatto, E. K.
- Mischtschenko, I. P., and Fomenko, M. M., effect of X-rays on formation of complement-binding substances in blood, A., 375.
- Mischtschenko, K. P., and Pronina, I. Z., analysis of admissible error in calculating heat of isothermal evaporation of salt solutions relative to pure water, A., 1324.
- Misener, A. D. See Burton, E. F., and Wilhelm, J. O.
- Mishima, T., [aluminium-nickel-iron] alloy for permanent magnets, (P.), B., 810.
- See also Nagaoka, Hantaro.
- Mishin, A. D. See Kozlov, V. N.
- Mishkind, D. See Tauber, H.
- Miskella, W. J., japanning metal parts, B., 465.
- Missenard, A., theory and laws of vaporisation, A., 691.
- Missenard-Quint, laws of evaporation, B., 82.
- Missoviski, L. See Deisenroth-Missoviski, M., and Kurtschatov, B. V.
- Mitamura, K. See Takahashi, E.
- Mitani, S., quantitative changes of glycogen in liver of the foetus and of the new-born infant, A., 240.
- Mitani, Y., liver diathermy and hepatic function. I. Bile secretion. II. Excretion of dyes, A., 1147.
- Mitchell, A. C. G., and Murphy, E. J., scattering of slow neutrons, A., 1441.
- See also Lipson, H. C.
- Mitchell, A. D., new indicators and other reagents employed in volumetric analysis, A., 182.
- Mitchell, C., acidity and physical characteristics of urine, A., 513.
- Mitchell, C. A., use of infra-red rays in examination of inks and pigments, B., 774. Colorimetric determination of gallic acid, B., 1129.
- Mitchell, D. P. See Dunning, J. R.
- Mitchell, H. H., balanced diets, net energy values, and specific dynamic effects, A., 239.
- See also Garrigus, W. P.
- Mitchell, H. L., pot-culture tests of forest-soil fertility, B., 1157.
- Mitchell, H. R. See Technical Research Works.
- Mitchell, H. S., and Dodge, W. M., cataract in rats fed on high-lactose rations, A., 649.
- Mitchell, J. A. M. W. See Imperial Chem. Industries.
- Mitchell, J. G., removal of tar or pitch from glass apparatus, B., 131.
- Mitchell, J. H., and Mattison, W. T., relationship between mineral content of soil and of plants grown on it, B., 422.
- See also La Master, J. P.
- Mitchell, J. H. (Bristol), and Ridler, K. E. W., speed of positive ions in nitrogen, A., 5.
- Mitchell, J. M., settling apparatus, (P.), B., 788.
- Mitchell, Joseph S., equation of state of monolayers, A., 1070.
- Mitchell, June S., comparative composition and colour of commercial tomato juice, B., 521.
- Mitchell, K., temperature dependence of the photo-electric effect, A., 1191.
- Mitchell, M. B., and Bentley, L., motor fuel, (P.), B., 11.
- Mitchell, R. W., soaps [for cleaning] felts, and slime [in papermaking], B., 719.
- Mitchell, T. A., and Hughes, L. M., treating [zinc sulphide] ores, (P.), B., 156. Chloridising ores by means of ferric chloride, (P.), B., 156. Chloridising metallurgical sulphide ores, (P.), B., 156. Treating tin-bearing ores, (P.), B., 156. Treating silver-bearing ores, (P.), B., 156. Recovering values [zinc and lead] from a sulphide ore, (P.), B., 156. Producing metal [zinc] chlorides from ores, (P.), B., 156. Recovery of tin from residues, (P.), B., 908.
- and Hughes-Mitchell Processes, Inc., chemical apparatus; [roaster], (P.), B., 753.
- Mitchell, W. See Imperial Chem. Industries.
- Mitchevitch, V. M., action of 2-chlorocyclopentanone on organomagnesium halides, A., 979.
- Mittford, W. B. See Brocklebank, E. W.
- Mithoff, R. C. See Standard Oil Co. of California.
- Mitkevitch, A. V., influence of mechanical vibrations on magnetic viscosity, A., 922.
- Mitolo, M., human tyrosinuria, A., 648.
- Mitra, B. N. See Linton, R. W.
- Mitra, H. C. See Ray, R. C.
- Mitra, P. See Ganguli, A.
- Mitra, R. See Mukherjee, J.
- Mitra, S. K., and Banerjee, S. S., dielectric constant of ionised air, A., 1304.
- Mitra, S. M., influence of KI on polarisation of fluorescence of dyes present in solutions, A., 12. Continuous bands of glycerol, A., 280. Polarisation of scattered radiation. I. Rayleigh scattering, A., 1301. Longitudinal light scattering by liquids, A., 1301.
- and Mehta, S., splitting of spectral lines by scattering in liquids, A., 564.
- Mitrovic, V. M. See Todorovic, K. N.
- Mitsche, R., flotation of non-metallic inclusions in molten metals, B., 553.
- Mitscherling, W. O., and Pacific Lumber Co., purification of viscose solutions, (P.), B., 448.
- Mitsubishi Denki Kabushiki Kaisha, Kato, Yogoro, and Takei, T., magnets made of metal oxide or oxides, (P.), B., 1002.
- Mittasch, A., catalytic causation of physiological phenomena, A., 1023.
- Mitteau, F., and Soc. d'Études Scientif. & d'Entreprises Industr., simultaneous manufacture of ammonium phosphate and of other fertiliser substances, (P.), B., 672.
- Mitter, P. C., and Chatterjee, N., purine derivatives from glyoxalines, A., 503.
- Das-Gupta, S., and Bachhwat, S., anthraquinone series, A., 495.
- Mitterbiller-Epp, K., recovering metals and metalloids from their oxide, silicate, and carbonate compounds, (P.), B., 638.

- Mittmann, P., and Amer. Lurgi Corp., zinc sheets particularly adapted for use in galvanic cells, (P.), B., 414.
- Mitton, H. E., and Davies, D. T., grading and classification of coal, B., 1078.
- Mittra, R. N. See Dhar, N. R.
- Mitzkevitch, M. S. See Vermel, E. M.
- Miwa, M., polished layer of metals, A., 1194.
- Miwa, T., baicalinase, an enzyme causing fission of flavoneglucuronide. II., A., 1024.
- Miyahara, T., biochemistry of allantoin. IV. Injection of adrenaline and allantoin excretion. V. Administration of yeast-nucleic acid and exogenous allantoin excretion, A., 389.
- Miyake, K., oxidation product of camphor, A., 754.
- Miyake, S., inner potential of zinc blende, A., 570. Reflexion of cathode ray from a crystal surface, A., 1306. Study of oxide films on metal surfaces with cathode-ray diffraction. I. Copper and its alloys, B., 952.
See also Itaka, I.
- Miyake, Y. See Uzumasa, Y.
- Miyama, R., galactosarabin prepared from seeds of the peanut, A., 736.
- Miyama, Y., and Saruya, K., canned tuna in oils, B., 122.
- Miyamoto, S., heterogeneous chemical reactions under the silent electric discharge. X. and XII. Preparation of colloidal solutions. XI. XIII. Reactions between hydrogen and solid inorganic compounds, A., 46, 177, 700, 943. Theory of adsorption, A., 578. Preparation of colloid solutions by the silent electrical discharge. III., A., 932.
- Miyamoto, T. See Sugimoto, H.
- Miyaniishi, M., influence of light on combination of hydrogen and oxygen and of hydrogen and nitrogen at various temperatures, A., 457. Ignition of hydrogen and oxygen by electric sparks in different reaction vessels, A., 937. Photochemical effect of nitrogen dioxide on the combination of hydrogen and oxygen, A., 943.
- Miyasaka, M. See Nagai, S.
- Miyata, A., anodic oxidation of aluminium by super-imposing three-phase a.c. on d.c., A., 1210. Inactive state [due] to formation of anodic film of aluminium and its application to prevention of corrosion; B., 154.
and Takoi, M., regulation of bath solution (dilute oxalic acid solution) for electrolytic oxidation of aluminium, B., 154.
- Miyata, T. See Fujita, A.
- Miyazaki, H., control of blood-cholesterol by the kidney, A., 230. Control of carbohydrate metabolism by the kidney, A., 241.
and Sato, Yasutaro, relation of nephro-hormone to blood-calcium, A., 538.
- Miyazaki, T., biochemistry of carbohydrates. V. Microdetermination of chondroitinsulphuric acid in cartilage. VI. Chondroitinsulphuric acid in cartilage and bone. IX. Fermentation of chondroitinsulphuric acid by *B. pyrocyanus*, pyocyanine, A., 111.
- Miyoshi, M., influence of sodium fluoride on phosphate metabolism of rabbit muscle, A., 1161.
- Miyoshi, S. See Tanemura, K.
- Mizoshita, T., and Ueno, M., cracking hydrogenation of Fushun shale oil under high pressure. II. Cracking of shale oil under high nitrogen and hydrogen pressure without catalyst. III. Cracking hydrogenation of shale oil under high hydrogen pressure with several catalysts. IV. Effect of amount of sulphur added to catalyst, reaction temperature, and reaction time. V. Effect of initial pressure and purity of hydrogen, B., 934.
- Mizune, Y., renal activity. VII. Effect of adrenal cortex, A., 258.
- Mizuno, S. See Kamei, S., and Yamaguchi, Y.
- Mizushima, S., and Morino, Y., Raman effect and dipole moment in relation to free rotation. II. Vibration of ethylene halides, A., 428.
- Morino, Y., and Higasi, K., dipole moment and Raman effect of molecules with groups capable of free rotation, A., 12. Raman effect and dipole moment in relation to free rotation. I., A., 281.
- Suenaga, K., and Kozima, K., dipole moment of hydrogen chloride and the solvent, A., 808.
See also Morino, Y.
- Mizuta, M., discontinuous fractionating column for separation of benzene, toluene, and xylene from the gasoline fraction of Syukkokô crude. II.—V., B., 179, 392, 535, 581.
- Mrádek, J. See Bělehrádek, J.
- Mladenović, M., oxidation product of γ -clemic acid, and its oxime, A., 495. Essential oils of gum elemi, B., 654.
- Młodzeevskaja, N. See Orlova, Y.
- Młodziejowski, A., fusion curves of solid solutions with formation of a chemical compound, A., 582.
- Mo, W. S. See Tao, L. F.
- Moberg, E. G., Greenberg, D. M., Revelle, R., and Allen, E. C., buffer mechanism of sea-water, A., 38.
See also Carter, N. M.
- Mobley, R. L., vacuum pump check valve, A., 1098.
See also Owen, W. L.
- Moe, J. H. See Büll, R.
- Mochalov, K. N., hydrates of lithium perchlorate, A., 1467.
- Moczarski, Z., and Bormann, J., influence of fat in fodder on fat content of cows' milk, A., 773.
- Modderman, R. S. T. See Holleman, L. W. J.
- Model, L. M., Kuzin, M. G., and Anshmid, Z. V., diet and reaction of urine, A., 380.
- Modell, W., lipins in the renal tubule of the cat, A., 376.
- Modic, R. See Samec, M.
- Modrzejewski, F. See Galecki, A.
- Möbius, H. See Nehring, K.
- Möbius, W. See Bürger, M.
- Moehlman, R. S., and Gonyer, F. A., monticellite from Crestmore, California, A., 725.
- Möhring, H. See Reinhold, H.
- Möhring, W., continuous distillation of crude oil, fuel oil, petroleum residues, petroleum earth, etc., to coke, (P.), B., 10.
- Möhringer, K., influence of soil reaction and phosphoric acid on growth of vines, B., 72.
- Moehrle, E., extraction, cracking, and hydrogenation of coal, B., 835. Treatment of heavy hydrocarbons, (P.), B., 135. Treatment of high-boiling hydrocarbons, (P.), B., 217.
- Möller, E. F. See Wagner-Jauregg, T.
- Möller, F. (Aachen). See Röntgen, P.
- Möller, Friedrich (Kiel). See Diels, O.
- Möller, G., preservation of egg-yolks, egg-whites, or both, (P.), B., 1067.
- Möller, H., action of carbon monoxide on ammoniacal solutions of cupric salts. I. Carbon monoxide and aminocupric compounds in absence of metallic copper. II. Carbon monoxide and aminocupric compounds in presence of metallic copper, A., 1332. and Leschewski, K., action of carbon monoxide on cupric salts, A., 1332.
See also Leschewski, K.
- Möller, M., application of cyanogen bromide as universal standardisation material, A., 183.
and Schlegel, G., determination of small quantities of magnesium sulphate, A., 1473.
- Moeller, W., possibility of refining native [German] tanning materials, B., 114. Acid action in leather, B., 644. Ammonia groups in relation to the acid content of the hide or of leather, B., 644. Action of aggressive gases on leather. I., B., 686. Decomposition of leather by oxygen. III., B., 1106.
- Möller-Christensen, E., synergism between oestrin and pituitrin, A., 259.
- Moelwyn-Hughes, E. A. See Bach, F.
- Moen, G., [effect of flour on loaf] grain and texture, B., 426.
- Moen, W. H. G. See Schonebaum, C. W.
- Mönch, F. See Kreichgauer, D.
- Mönnig, H., manurial value of Westphalian coal ash, B., 165.
- Moens, M. L., sterile filtration of beer, B., 1113.
- Moerbeek, B. H., and Van Beest, A. C., cold test for fuels, B., 614, 888.
- Moerk, F. N., Butts, D. C. A., Lawler, F. C., and Mattis, P. A., springs of Fairmount Park, A., 1343.
- Moers, K., production of ductile tantalum by the growth method in a stream of hydrogen, B., 678.
- Möser, A., testing of refractory material for industrial firing, B., 406.
- Moffett, E. C., and Amer. Cyanamid Co., case-hardening metals [steel], (P.), B., 461. Case-hardening [of iron and steel], (P.), B., 730.
- Moffett, E. W. See Gebauer-Fülnegg, E.
- Moggridge, R. C. G., and Ogston, A. G., potentiometric titration of solutions of vitamin-B₁, A., 668.
- Mohamed, A. F. See Bangham, D. H.
- Mohammad, A. See Liebhaufsky, H. A.
- Mohammad, W., and Sbarma, P. N., hyperfine structure of spectrum lines of manganese are in vacuum. I., A., 136.
- Mohanty, H. See Gupta, M. M. S.
- Mohler, D. D., Henderson, W. N., and Solvay Process Co., dry lime treatment of [ammoniacal] liquors, (P.), B., 403.
- Mohler, F. L., and Taylor, L. S., ionisation of liquid carbon disulphide by X-rays, A., 148. Bactericidal effects of X-rays, A., 409.
See also Taylor, L. S.
- Mohler, H., cherry water (kirschwasser). I., B., 41.

- Mohler, H., and Almasy, F., cherry water (kirschwasser). II., B., 376.
and Hämmerle, W., bouquet substances of kirschwasser, B., 824.
and Hartnagel, J., conductivity apparatus for serial determinations [e.g., on milk], B., 825. Apparatus for collection of gas [from blown cans containing foodstuffs], B., 826.
and Helberg, E., Jaffé-Folin reaction of hydrolysed gelatin, B., 35.
and Herzfeld, E., diacetyl in milk products, B., 521.
- Mohn, A., and Rhodes-Perry-Martin, Inc., cleaning fluid [for fabrics], (P.), B., 59.
- Mohos, E. See Friesz, I.
- Mohr, C. B. O. See Massey, H. S. W.
- Mohr, O., oxygen content and electrical properties of valve layers of W, Ta, and Nb, A., 430.
- Mohr, R. See Goldstein, H.
- Mohr, W. See Dibbern.
- Mohrhenn, H. G. G. See Ingold, C. K.
- Moilliet, J. L., Collie, B., Robinson, C., and Hartley, G. S., significance and determination of mobilities in study of colloidal electrolytes, A., 299.
- Moir, C. See Dudley, H. W.
- Moir, D. D., and Hinks, E., determination of total alkaloids in cocoa and of coccomatter in flour confectionery, B., 781.
- Moir, J. C. See Dudley, H. W.
- Mokhnaecheva, A. I., effect of tricesol and chlorethone on pressor action of adrenaline, B., 478.
- Moklazingal, W. See Waterman, H. I.
- Mokruschin, S. G., surface energy of molecules and their physico-chemical properties. V. Surface energy and dissociation temperature of complex compounds, A., 21. Laminar systems. I. Uni- and multi-molecular sulphide and hydroxide layers at phase boundaries, A., 161.
and Demjanova, N. M., laminar systems. II. Kinetics of formation of uni- and multi-molecular layers of cupric sulphide at the surface of copper sulphate solutions, A., 1317.
and Krilov, E. I., surface energy of molecules and their physico-chemical properties. IV. Surface energy and b.p. in organic and inorganic homologous series, A., 21.
- Mokrzycki, J. See Sucharda, E.
- Moktadar, A. See Sircar, S. S. G.
- Molaska Corporation. See Black, T.
- Moldavan, A., modified technique for detection of the *Escherichia-Aërobacter* group in milk, A., 1420.
- Moldavski, B. L., hydrogenation of phenols, B., 795.
and Arkina, S. E., Syukcev bituminous mineral, B., 53.
and Kumari, Z. I., destructive hydrogenation of peat, B., 437.
and Livschitz, S. E., isomerisation of hydrocarbons. I. Chlorination of hexane and octane isomerides with antimony pentachloride as a method for their determination, A., 728, 1102. Hydrogenation of oxygen-containing compounds. II. Reduction of phenols in the primary tar of Cherekmkhov coals, B., 54.
- Moldavsky, L. F. See Gellhorn, E.
- Moldenhauer, M., Hessian bauxite deposits, A., 323. Phosphorite problem on the Lahn, B., 451. Solid fuel for internal-combustion engines, B., 534.
- Moles, E. See De Robles, C. R., Escribano, A., Garrido, A., Retortillo, N. M., and Toval, M. T.
- Molesworth, E. N. See Robinson & Son, Ltd., T.
- Molinari, E., aldehydes and ketones in tobacco smoke, B., 381.
- Molinari, H., and Carta Satta, G., industrial manufacture of penthrite, B., 663.
- Molinary, R. See Sendrail, M.
- Molinski, S. See Joszt, A.
- Moll, F., chemical fireproofing of wooden building material, B., 308. Wood preservation; osmosis process, B., 548.
- Moll, K., adhesion of bituminous binders to various stones, B., 62.
- Moll, T., biological value of vitamin-C, A., 417.
- Moll, W. J. H., Burger, H. C., and Reichert, W. J., instruments for measuring spectral absorption, A., 722.
- Mollaret, P., and Erber, B., lumbar and sub-occipital cerebrospinal fluids in experimental poliomyelitis in monkeys, A., 236.
and Stefanopoulo, G. J., lumbar and sub-occipital cerebrospinal fluid in experimental yellow fever in *Macacus rhesus*, A., 237.
- Mollestad, O., micro-determination of ethyl alcohol in organs, A., 244.
- Mollet, P. See Errera, J.
- Molliard, M., and Crépin, A., characteristics of green plants which develop in air enriched with carbon dioxide, A., 131.
- Molloy, D. M. See Lamson, P. D.
- Mollwo, E., electron conduction and colour centres in fluorspar, A., 915.
and Roos, W., measurement of number of colour centres in crystals, A., 915.
- Molnár, István, and Gruber, Z., central disturbance of sodium chloride metabolism, A., 1274.
See also Lieben, F.
- Molnar, J., physico-chemical properties of picric acid with varying p_{H} , A., 1072.
- Molnar, Stefan. See Molnár, István.
- Molodenski, V. S. See Buizov, B. V.
- Moloney, P. J., and Orr, M. D., purification of diphtheria toxoid, A., 1028.
See also Smith, M. D.
- Molstad, M. C., and Dodge, B. F., zinc oxide-chromium oxide catalysts for methyl alcohol synthesis, B., 583.
- Molterer, H. See Pavelka, F.
- Momigliano, E., phosphoric acid exchange in blood of pregnant woman, A., 237.
- Momm, G. See Esser, H.
- Mommsen, H., "menstruation poisons," A., 647.
- Momose, I. See Sakuma, I.
- Momose, T. See Asahina, Y.
- Monaghan, B., and White, Harvey L., comparison of the electrokinetic potentials at fused and unfused glass surfaces, A., 1460.
- White, Harvey L., and Urban, F., comparison of electrophoretic velocities of cellophane and collodion suspensions with electro-osmotic velocities through membranes of the same materials, A., 578. Comparison of electrophoretic, electro-osmotic, and stream potential isoelectric points at glass and gelatin surfaces, A., 933.
See also White, Harvey L.
- Monblanova, V. V. See Kobosev, N. I.
- Monchot. See Fron.
- Moncrieff, R. W. See Brit. Celanese.
- Mond Nickel Co., Ltd., and Atkinson, R. H., solution of metals of platinum group [stripping rhodium plate], (P.), B., 157.
- Mondain-Monval, P., allotropy and crystallisation of vitreous substances, A., 154. Properties of ternary heterogeneous mixtures, A., 1067.
and Wellard, R., influence of temperature on explosion of mixtures of air and hydrocarbons, A., 307.
- Monden, S. See Kita, G.
- Moness, E., and Christiansen, W. G., attempt to ketonise ergosterol, A., 617.
Harris, S. E., and Christiansen, W. G., germicidal and antiseptic activity of some mercury compounds, A., 1161.
See also Christiansen, W. G.
- Mongan, C., electron diffraction by aluminium and aluminium oxides, A., 434.
- Monguillon, P. See Lemoigne, M.
- Monguio, J., synthetic production of β -hydroxybutyric and acetoacetic acids in fasting and in diabetes, A., 382. Control of hepatic function by pre-formed ammonia of blood, A., 654.
- Monier, A., distribution of glutathione in the organs of some marine invertebrates, A., 1521.
- Monier-Williams, G. W., aluminium in food, B., 1116.
- Monk, R. G., and Ellingham, H. J. T., relative oxidation potentials of nitric acid solutions, A., 450. Electrodeposition of tin alloys from alkaline stannate baths, B., 1098.
- Monner, A. A., removal of water-marks from negatives, B., 479.
- Monnet, R., quinidine thiocyanate; gravimetric and volumetric determination of quinidine, A., 1259. Rapid identification of cinchona preparations by the erythroquinine and thalleoquinine reactions, B., 653.
- Monod-Herzen, G., periodic property of atomic nuclei, A., 8. Neutrons, A., 1295.
- Monoszon, A. M., Gurjanova, E. N., and Schattenstein, A. I., dehydration of magnesium chloride with liquid ammonia, B., 723.
See also Pleskov, V. A.
- Monrad, C. C., applications of the film concept in petroleum refining, B., 886.
- Monro, D. A. See Standard Oil Co.
- Monro, W. L. See Amer. Window Glass Co.
- Monroe, C. F. See Krauss, W. E.
- Monroe, E. See Blicke, F. F.
- Monsanto Chemical Co., carboxylic acid chlorides, (P.), B., 13. Compounds having germicidal and disinfectant properties, (P.), B., 288.
and Comte, F., separation of *p*-cresol from liquid phenolic mixtures, (P.), B., 539. Separation of *m*-cresol from liquid phenolic mixtures, (P.), B., 585.
See also Bertsch, J. A., Carswell, T. S., Clemmensen, E., Comte, F., Dvornikoff, M. N., Kyrides, L. P., and Livingston, J. W.
- Monsanto Holdings, Ltd. See Chapman, C.
- Monserat, M., electrolytic production of metallic compounds, (P.), B., 226.
- Montagne, P., calculation and graphical representation of elementary displacements in [reversible] reactions of homogeneous equilibrium, A., 301. Elementary displacements in homogeneous chemical equilibria; variations of concentration; constant-volume reactions, A., 446.

- Montank, I. A., preparation of reagents for the albuminoid nitrogen determination [in water analysis], B., 527.
- "Montecatini" Società Generale per l'Industria Mineraria & Agricola, calcium nitrate, (P.), B., 306. Anodes for electrolytic cells for production of aluminium, (P.), B., 638. Electrolytic cells for production of aluminium, (P.), B., 811.
- Montequi, R., hydrogen sulphide apparatus, A., 467.
- and Gallego, M., compounds of vanadium with 8-hydroxyquinoline, and their analytical applications, A., 464.
- Montmerie, R. F. See Green, H. H.
- Montgomery, A. See Peacock, M. A.
- Montgomery, A. E., and Batchelor, T. G., Delthirna sizing process [for paper and boards], B., 222.
- Montgomery, C. G., possible explanation of the frequency distribution of the size of Hoffmann stösse, A., 1442.
- and Montgomery, D. D., distribution of cosmic ray nuclear disintegration in time, A., 143. Variation with altitude of the production of hursts of cosmic-ray ionisation, A., 560.
- See also Swann, W. F. G.
- Montgomery, C. W. See Storch, H. H.
- Montgomery, D. D. See Montgomery, C. G.
- Montgomery, E., and Hudson, C. S., three crystalline hexa-acetates of *d*-a-mannoheptose, A., 69.
- Montgomery, F. H. See Hartman, F. E.
- Montgomery, H., composition of glomerular urine. XII. Reaction of glomerular urine of frogs and *Necturi*, A., 1267.
- See also Pierce, J. A.
- Montgomery, M. See Stark, O. K.
- Montgomery, M. F., effect of amylal on pilocarpine-induced sub-maxillary and gastric secretion, A., 1410.
- Montgomery, T. N. See Imperial Chem. Industries.
- Montgomery, W. R. See Hartman, F. E.
- Monti, (Signa.) L., and Cirelli, (Signa.) V., thalioquinone reaction, A., 500.
- Montignie, E., action of potassium iodide on fairly insoluble compounds, A., 179. Light reaction of alkaline bases on mercuric iodide, A., 458. Reactions of mercuric iodide, A., 459. Action of cyanogen compounds on HgI_2 , A., 459. Action of alkaline-earth bases and silver oxide on mercuric iodide, A., 459. Action of mercuric iodide on phenols in alkaline medium, A., 615. Presence of sterols in algae, A., 673. Action of hot solutions of alkaline bases on mercuric iodide, A., 714. Slow action of fuming nitric acid vapours on different elements, A., 715. Law of volatility, A., 724. Tellurates, A., 834. Hydrogen diarsenide: As_2H_2 , A., 945. Additive compounds of arsenic [tri]chloride, A., 1090. Action of mercuric iodide on cholesterol, A., 1120. Presence of sterols in vesicular cryptogams, A., 1180.
- Montillon, G. H. See Faust, C. L.
- Monzer, A., and Skript, G., mould for intimately uniting steel and bronze, (P.), B., 314.
- Moon, C. H. See Maxted, E. B.
- Moon, H. H. See Culpepper, C. W.
- Moon, P. B., and Tillman, J. R., velocities of "slow" neutrons, A., 802.
- See also Tillman, J. R.
- Moon, R. L. See Berry, R. F.
- Mooney, M., and Ewart, R. H., conical cylindrical viscosimeter, A., 723.
- Mooney, R. C. L., configuration of the tri-iodide group in ammonium tri-iodide crystals, A., 812.
- and Zaechariasen, W. H., crystal lattice of ammonium persulphate $(\text{NH}_4)_2\text{S}_2\text{O}_8$, and structure of the persulphate group, A., 152.
- Moor, V. G., and Katzman, S. V., preparation of amyl chlorides from the amylene fraction of vapour-phase cracked gasoline, B., 1031. Composition of the amylene fraction of vapour-phase cracked gasoline, B., 1031.
- See also Markovitch, M. B.
- Moore, A. R., relative values of cations in antagonising action of hydroxyl ions on premembrane system of the eggs of five cecidoids, A., 1012.
- Moore, B., impact strength tester, B., 481.
- and Barton, T. H., concentration of sulphuric acid in vitreosil apparatus, B., 451.
- and Patrick, W. L., fused magnesia, B., 901.
- See also Thermal Synd.
- Moore, B. J., tunnel ovens, (P.), B., 949. Tunnel kilns, (P.), B., 1095.
- and Clifford, C., kiln trucks, (P.), B., 1025.
- Moore, C. G., Zucker, M., and Gildden Co., wood stain, (P.), B., 904.
- Moore, C. L., antioxidants: theory and application, B., 1003.
- Moore, C. N. See Haskins, C. P.
- Moore, D. G., and Hursh, R. K., effect of fused alumina and boron oxide on plastic fireclays, B., 768.
- Moore, D. P., lamp filament, (P.), B., 30.
- Moore, E. E., and Tabern, D. L., crystalline ephedrine alkaloid, A., 764.
- Moore, E. K., and Highberger, J. H., grease stains on [vegetable-tanned sole] leather. IV. Effect of various materials on removal of fat from steer hide, B., 242.
- See also Highberger, J. H.
- Moore, E. S., genetic relations of silver deposits and Keweenaw diabases in Ontario, A., 725.
- Moore, E. W. See Fair, G. M.
- Moore, F. J. See Houck, C. A.
- Moore, G. A., jun. See Hurd, C. B.
- Moore, G. F., and U.S. Phosphoric Products Corp., phosphoric acid, (P.), B., 61.
- Moore, G. V. See Dow Chem. Co.
- Moore, H., electrodeposition of metals, B., 192.
- and Liddiard, E. A. G., corrosion-resisting non-ferrous alloys, B., 955.
- Moore, H. A. See Geer, P. L.
- Moore, J. C., and Southern Oregon Sales, maturity tester [for fruit], (P.), B., 1116.
- Moore, J. E., drying machine [for laundry purposes], (P.), B., 99.
- Moore, J. G. See Imperial Chem. Industries.
- Moore, J. M. See Haldeman, K. O.
- Moore, J. R. (Oxford). See Keeley, T. C., and Mendelssohn, K.
- Moore, Jay R., and Wallace, E. K., treatment of fats to produce fatty acids, (P.), B., 417.
- Moore, K. H., precipitation-hardening and secondary structure, A., 1449.
- Moore, L. A., Huffman, C. F., and Duncan, C. W., blindness in cattle associated with constriction of the optic nerve and probably of nutritional origin, A., 1525.
- Moore, M. B., and Abbott Labs., [preservation of] allergen solution, (P.), B., 924.
- and Unger, L., pollen and pollen extracts. XII. Enzyme digestion of pollen allergens, A., 549.
- See also Abbott Labs., and Unger, L.
- Moore, M. H., field-spraying trial of combined fungicide-contact insecticide sprays, 1933, B., 517. Apple canker (*Nectria galligena*), B., 1013.
- Moore, M. L., Day, A. A., and Suter, C. M., preparation and germicidal properties of derivatives of 4-*n*-butylresorcinol, A., 79.
- and Johnson, T. B., action of sulphur on aniline and similar amines, A., 1118. Molecular rearrangement of *N*-thiolanilides. I, A., 1359.
- See also Johnson, T. B.
- Moore, M. M., Thorburn, R. R., Wilson, W. B., and Contact Filtration Co., clarifying and improving colour of hydrocarbon oils, (P.), B., 1035.
- Moore, R. G. D. See Clark, R. H.
- Moore, R. J., and Turkington, V. H., specification methods for evaluating phenolic resin varnishes, B., 815.
- Moore, R. M., stimulation of peripheral nerve-elements subserving pain-sensibility by intra-arterial injections of neutral solutions, A., 530.
- Moore, S., retorts for distillation, calcination, or heat treatment of coal, shale, peat, wood, and other suitable fragmentary solid or semi-solid materials, (P.), B., 890, 1073.
- Moore, T. See Booth, R. G., Dann, W. J., and Davies, A. W.
- Moore, W., fumigation experiments with California red scale under orchard conditions, B., 327. Esters as repellents [for insects], B., 374.
- Moore, W. A., and Rubber Service Labs. Co., vulcanisation of rubber, etc., (P.), B., 280.
- Moore, W. F. See Texas Co.
- Moore Drop Forging Co. See Collins, J. M.
- Moorshead, W. A., problems of the glass bottle industry, B., 307.
- Moose, J. E., Pritchard, W. N., and Swann Research, Inc., diphenyl, (P.), B., 621.
- Moracci, E. See Scaffidi, V.
- Moraczewski, W. von, and Sadowski, T., elimination of cations from swollen gelatin; effect of cholesterol and lecithin on swelling, A., 581.
- Morales, A., effects of glucose on respiratory exchange of adrenalectomised dogs, A., 1529.
- Morales-Otero, P., and Pomaes-Lebron, A., fibrinolytic activity of hemolytic streptococci on blood of cases of recurrent tropical lymphangitis, A., 384.
- Moran, C. S. See Riddle, O.
- Moran, T., post-mortem and refrigeration changes in meat, B., 571.
- See also Lloyd, (Miss) D. J.
- Morani, V., reaction of soils and crop production, B., 72.
- Moravec, R. See Shell Development Co.
- Morawa, F. W., special refractories in open-hearth [steel] furnace, B., 409.
- Morawetz, R., preparation for removing rust, ink, and fruit stains from linen and other washable materials, (P.), B., 186.

- Morawietz, M. See Zintl, E.
 Morawitz, P., pathological skin pigmentation and "pigment-vitamins," A., 107.
 Morchoisne, J. See Régnier, J.
 Morcom, R. K. See Transparent Paper, Ltd.
 Morden, C. W., and McGregor, George H., "stock-maker," precision laboratory [pulp] beater, B., 489.
 Mordey, W. M., electrical treatment of mineral and other material for separating different constituents thereof from one another, (P.), B., 507.
 Mordukhovich, E. See Klimov, B. K.
 More, K. R., isotope displacement in the arc spectrum of tungsten, A., 1292.
 Morea, R. See Braier, B.
 Moreau, L., Chaudron, G., and Portevin, A., removal of gases from metals, B., 905.
 Morehouse, F. R., and Maass, O., preparation and physical properties of aliphatic acetylenes, A., 192.
 Morehouse, N. F. See Becker, E. R.
 Morel, A., Rochaix, A., and Delaborde, H., bactericidal and sterilising powers of aminobenzoic esters, A., 1031.
 Rochaix, A., Denard, P., Perrot, L., and Dessaignes, C., sterilising power of neutral 8-hydroxyquinoline sulphate (sunoxol) on cultures of pathogenic bacteria, A., 537.
 Rochaix, A., and Dumas, Y., antiseptic and growth-inhibiting power of benzene and its halogen derivatives, A., 126.
 See also Arloing, F.
 Morel, F. See Jame, L.
 Moreland, C. F., factors affecting development of cotyledonary buds of common bean, *Phaseolus vulgaris*, A., 419.
 Morell, P. J., and Amer. Brass Co., zinc-base alloy, (P.), B., 235.
 Morell, S., Baur, L., and Link, K. P., derivatives of *d*-galacturonic acid. II. Synthesis of methyl α -1-bromo-*d*-galacturonate triacetate and its conversion into β -methyl-*d*-galacturonide, A., 1352.
 and Link, K. P., derivatives of *d*-galacturonic acid. I. Esterification and acylation of *d*-galacturonic acid, A., 608.
 Morelli, A. See Carteni, A.
 Moreno-Martin, F. See Polonovski, M.
 Morette, A., reduction of vanadium oxides by carbon monoxide and by carbon, A., 313. Preparation of pure vanadium, A., 715.
 See also Lebeau, P.
 Moretti, R., moulding of clay after heating at various temperatures, B., 591.
 Morey, D. R., micellar arrangement in cellulose fibres, B., 221. Dichroism of dyed fibres as a means of studying micellar arrangement, B., 988.
 Morey, G. W., constitution of glass, B., 148. Volatilisation and constitution of glass, B., 725. Glassy phase in manufacture and use of refractories, B., 725.
 and Warren, B. E., annealing of Pyrex chemical-resistant glass, B., 948.
 and Philadelphia Quartz Co., sodium sesquisilicate, (P.), B., 269.
 Morgan, A. F., nutritive value of dried fruits, B., 476.
 and Frederick, H., vitamin-B (B_1) in bread as affected by baking, B., 1019.
 Morgan, A. F., Garrison, E. A., Householder, H., Hansen, A. M., Seberger, M. V., Watenpaugh, J. T., Felsler, A., and Long, M. L., effect of acid, neutral, and basic diets on the calcium and phosphorus metabolism of dogs, A., 393.
 and Hunt, M. J., vitamin- B_1 and - B_2 content of wheat products, A., 1286.
 Hunt, M. J., and Squier, M., vitamin- B_1 and - B_2 contents of prunes, B., 921.
 Kimmel, L., Field, A., and Nichols, P. F., vitamin content of sultanina (Thompson seedless) grapes and raisins, B., 572. Vitamin content of figs, B., 572.
 and Samisch, Z., sequence and extent of tissue changes resulting from moderate doses of viosterol and parathyroid extract, A., 670.
 Morgan, C. J., vegetable proteins in laying and breeding rations, B., 332.
 Morgan, E. See Brit. Cast Iron Res. Assoc., and Norbury, A. L.
 Morgan, E. H., filter, (P.), B., 51.
 Morgan, F. See Shawhan, E. N.
 Morgan, G. T., recent researches on the rarer elements, A., 716.
 and Pettet, A. B. J., molecular compounds of phenols, A., 744. Phenols of low-temperature tar. I, B., 437.
 and Walton, E., new derivatives of *p*-arsinipic acid. VI. *p*-Arsinopimelic and *p*-arsinosuberanic acid and related compounds, A., 768.
 Morgan, H. E., De Vore, L. T., and Baker, R. F., amplifying and recording small c.m.f., A., 189.
 Morgan, H. H. See Imperial Chem. Industries.
 Morgan, H. W. See Kress, O.
 Morgan, J. D., thermal and electrical theories of spark ignition, A., 40.
 Morgan, J. J., and Munday, J. C., thermal decomposition of *n*-pentane, A., 1348.
 and Stolzenbach, C. F., heavy-oil tar emulsions in water-gas process, B., 53.
 See also Lang, J. W.
 Morgan, J. R. E., rôle of histamine in inflammation, A., 650.
 Morgan, J. S., heating of coal, (P.), B., 179.
 Morgan, M. F., and Street, O. E., rate of growth and nitrogen assimilation of Havana seed tobacco, B., 1061.
 Morgan, R., Dalsimer, P. D., and Smith, N., corrosion of wrought iron and steel, B., 410.
 and Smith, N., camera for electron diffraction, A., 1476.
 Morgan, R. S., Edisbury, J. R., and Morton, R. A., discrepancy between biological assays and other methods of determining vitamin-A. I, A., 1034.
 and Pritchard, H., vitamin potency and associated characteristics of average cod-liver oil, B., 733.
 Morgan, T. N., movements of the uterus. II. Action of extract of corpus luteum on the uterus of the unanaesthetised rabbit. III. Action of gonadotropic extracts on movements of the uterus in anaesthetised rabbits, A., 1426.
 Morgan, V. E., and Chichester, D. C., blood of domestic fowl, A., 1142.
 Morgan, V. G., and Watson, H. B., influence of nuclear substituents on side-chain reactions. III. Base-catalysed prototropy of substituted acetophenones, A., 1209.
 See also Evans, D. P.
 Morgan, W. H. See Linkel, L. E.
 Morgan, W. R., condensation of moisture in flues, B., 6.
 Morgan Crucible, Co., Ltd. See Gow, C. C.
 Morgan & Wright. See Cadwell, S. M., and Gerke, R. H.
 Morgareidge, K. See O'Brien, B.
 Morgen, R. A., dry-cleaning process [for textiles], (P.), B., 898.
 See also Raymond, G.
 Morgenstern, M. See Martin, L.
 Morgenstern, von, detection of small amounts of invert sugar in the presence of sucrose, A., 848; B., 328. Corrosion of containers by fruit preserves, B., 572.
 Morgulis, N. D., quantum theory of ionisation and neutralisation on metallic surfaces, A., 1298.
 and Bernadiner, M., disintegration of a monatomic thorium film on a tungsten cathode in a discharge in mercury vapour, A., 677.
 Morgulis, S., and Munsell, J. D., glycolysis in blood. II. Glycolysis and distribution of phosphate compounds, A., 1001.
 Mori, S. See Ishibashi, M.
 Mori, Shuichi. See Araki, T.
 Moriarty, M. See O'Connor, J. M.
 Moriguchi, N., effect of supersonic waves on chemical phenomena. III. Effect on concentration polarisation. IV. Effect on overvoltage, A., 306.
 Morikawa, K., Benedict, W. S., and Taylor, H. S., catalytic exchange of deuterium and methane, A., 588.
 See also Taylor, H. S.
 Morikawa, Kiyoshi. See Watanabe, Sumi.
 Morimune, M., fermentability of blood-sugar, especially of the bound sugar in diabetics, A., 1001.
 Morin, C., alkalimetric determination of barbiturates, B., 828.
 Morin, H. G. S., Bader, H., and Martin, P., how Paris-green [larvicide] acts, B., 528.
 and Martin, P., use of Paris-green in Indo-China, B., 528.
 Morin, N. V. See Iljinski, V. P.
 Morino, Y., linking frequency of heavy acetylene C_2H_2 , A., 146. Deformation frequencies of heavy acetylenes, A., 806.
 and Mizushima, S., proper vibrations of heavy acetylene and ethylene halides, A., 1448.
 See also Mizushima, S.
 Morioka, S. See Murakami, T.
 Morita, N., and Titani, T., production of light water and determination of the deuterium concentration in normal water, A., 1087.
 Moritz, A. J. L., and Amer. Enka Corp., artificial silk, (P.), B., 1137.
 Moritz, G. See Tammann, G.
 Moritz, P. B. See Kulski, L. A.
 Moriya, T. See Tabata, K.
 Mork, H. S., cellulose composition [for lacquers, etc.], (P.), B., 914.
 Morley, D. E., chlorination of water with special reference to the Cheltenham supply, B., 1168.
 Morooka, H. See Tokuoaka, M.
 Moross, W. P. D., and Amer. Cement Paint Co., dry-powder cement-paint preparation, (P.), B., 914.
 Morozov, A. A., imbibition of water by cellophane, B., 300. Conductometric determination of amino-dyes, B., 444.
 See also Liepatov, S. M.

- Morozov, I. S., preparation of hydrochloric acid from hydrogen and chlorine, B., 848.
See also Urazov, G. G.
- Morozov, N. M., kinetics of sorption processes of hydrogen on iron, A., 578.
- Kagan, M. J., and Grosblat, B. S., vapour pressure of the binary systems acetaldehyde-water and -acetic acid, A., 695.
- Morozova, A. S. See Libinson, I. M.
- Morozova, N. V. See Ivanov, K. I.
- Morrell, J. C., activated carbon, (P.), B., 616.
See also Dryer, C. G., Egloff, G., Lowry, C. D., jun., and Universal Oil Products Co.
- Morrill, W. See Gen. Electric Co.
- Morris, A. E. See Gas Chambers & Coke Ovens.
- Morris, A. J. See Jackson, G.
- Morris, C. J. O. R., still for concentration under reduced pressure, A., 467.
See also Gulland, J. M.
- Morris, F. See Tankard, A. R.
- Morris, H. H., exterior paints, B., 238.
- Morris, H. J. See Allison, F. E.
- Morris, L. P. See Totman, F. B.
- Morris, M. J. R., and Kautz, K., stainless steels and vitreous enamelled irons in architecture, B., 1097.
- Morris, N., phosphorus retention and alkalosis in infantile tetany, A., 1011.
- Morris, P. R., and Duplate Corp., laminated glass, (P.), B., 725.
- Morris, R. C., Hanford, W. E., and Adams, R., structure of vasicine. III. Position of the hydroxyl group, A., 873.
- Morris, R. E. See Lucas, H. J.
- Morris, S. G. See Taylor, T. C.
- Morris, T. N., diffusion of hydrogen through mild steel during acid corrosion, B., 457. Tinplate corrosion in canning, B., 552.
- Morris, V. H., and Sayre, J. D., solubility of potassium in maize tissues, A., 1549.
- Morris, V. N. See Park, C. R.
- Morrison, A. L. See Calico Printers' Assoc.
- Morrison, F. B., feeding value of canning-factory silage, B., 251.
- Morrison, F. R. See Penfold, A. R.
- Morrison, H. R. See Ward, M.
- Morrison, M. H. See Du Pont de Nemours & Co., E. I.
- Morrison, R. W. See Bliss, A. R., jun.
- Morrison Carpenter & Co., Ltd. See Carpenter, C. F.
- Morrow, J. B., and Proctor, C. P., variables in coal sampling, B., 1078.
- Morsch, K., β -ureidocarbonylic acids and dihydroureils. I. β -Phenylureidocarbonylic esters and 3-phenyldihydroureils, A., 94.
- Morscher, L. N., jun., relative intensities in the principal doublet of thallium under arc and fluorescence excitation, A., 1292.
- Morse, H. H., toxic influence of fluorine in phosphatic fertilisers on germination of corn, B., 471.
- Morse, M. See Schlutz, F. W.
- Morse, P. M., Allis, W. P., and Lamar, E. S., velocity distributions of elastically colliding electrons, A., 1294.
- Morsman, H. J., 5:5-diphenylbarbituric acid, 5-phenyl-5-cyclohexylbarbituric acid, and 5-phenyl-5-cyclohexenylbarbituric acid, A., 1507.
- Mortensen, R. A., and Leighton, P. A., molecular changes accompanying radioactive transformation of radium-D, A., 6.
- Mortenson, F. N., Espe, D. L., and Cannon, C. Y., effect of heating milk on the time during which curds remain in the abomasum of calves, B., 873.
- Mortenson, M., deactivation of pyrites, B., 855.
- Morth, H. See Pavelka, F.
- Mortier, P., application of buoyancy method in measuring dielectric constant of electrolyte solutions, A., 723. Molecular association and polarisation of ethyl alcohol in various solvents, A., 1067.
See also Müller, F. H.
- Mortl, F. See Krebitz, J.
- Morton, A. A., converted air-pump shaker, A., 58.
- Clapp, D. B., and Branch, C. F., new cancer-producing hydrocarbons, A., 1268.
- and Horvitz, D., dehydrogenation of nicotine in toluene as a solvent, A., 1513.
- Morton, B. B., nickel-bearing alloys in production and refining of petroleum, B., 1098.
- Morton, F. A. See Parker, J. R.
- Morton, G. A., directional effects in electron diffraction from single crystals, A., 153.
- Morton, J. J., and Beers, D. N., tumour-growth inhibiting factor from normal human connective tissue, A., 886.
- Morton, L. W. See Brit. Thomson-Houston Co.
- Morton, R. A. See Edisbury, J. R., and Morgan, R. S.
- Morton, T. H., dyeing of cellulose with direct dyes; importance of colloidal constitution of the dye solution and of fine structure of the fibre, B., 302.
- Morton, W. A., and Amco, Inc., glass-melting tank, (P.), B., 1094.
- Geer, P. L., and Amco, Inc., heat treatment chamber [lehr], (P.), B., 804.
- Annealing of glassware, (P.), B., 902.
See also Geer, P. L.
- Morzycki, J., and Zablocki, B., endotoxin of typhus bacilli prepared by repeated freezing, A., 256.
- Mosebach, R. See Nacken, R.
- Mosenthal, H. O., and Bruger, M., urea ratio as a measure of renal function, A., 641.
See also Bruger, M.
- Moser, Hans. See Philippi, E.
- Moser, Heimo. See Philippi, E.
- Moser, Helmut, compact rotatable vacuum gauge with three ranges for pressures of 700—0.0001 mm., A., 321. Filling high-temperature mercury thermometers with a condensed gas, A., 465.
- Mosettig, E., and Meitzner, E., preparation of morphenol (3-hydroxy-4:5-oxido-phenanthrene) from morphine, A., 366.
- and Robinson, Richard A., benzofuro-quinolines, A., 871.
See also Kamp, J. van de.
- Mosher, H. H., reinvigoring used [silk] boil-off liquor for additional degumming purposes, B., 488.
- Mosinee Paper Mills Co. See Kernin, A. G.
- Mosinger, M. See Roussy, G.
- Moskalenskaja, E. See Beresovskaja, F.
- Moskovits, N., esters, (P.), B., 262.
- Moskovitsch, S. M., kinetics of decomposition process and problem of "chains" in the solid phase, A., 1083.
- Moskowitz, S., Landes, W., and Himmel-farb, D., distinguishing between new and second-hand cotton [upholstery] filling materials, B., 896.
- Mosley, V. M. See Maxwell, L. R.
- Mosmann, C. E., modern contact filtration and pressure filters [for oil refining], B., 757.
- Mosonyi, J., biological genesis of vitamin-C, A., 263.
- and Voith, L., ultra-filtration in the glomeruli, A., 380.
- Moss, A. H. See Newell & Co., Ltd., E.
- Moss, E. B., rapid filtration of viscous liquids, A., 59.
- Moss, H. V., sugar kept from caking by addition of calcium phosphate, B., 249.
- Wheelock, T. H., and Swann Research, Inc., free-flowing powdered milk, (P.), B., 429.
- Moss, S. A., jun., Rideal, E. K., and Smith, E. C. B., expansion of films of myosin on potassium lactate, A., 1201.
- Moss, W. C., union calorimeter; optimum volume of gas, A., 951.
See also Hales, J. S.
- Moss, W. H. See Brit. Celanese.
- Moss, W. P., lead poisoning in calves, A., 1414.
- Moss Gear Co., Ltd., Duckitt, W., and Goode, F. H., case-hardening of iron or steel, (P.), B., 638.
- Mossini, A., action of organic substances on alcoholic fermentation. V. Folliculin, A., 1539.
- and Recordati, G., papaverine phenyl-ethylbarbiturate ("pavemal"), A., 1388.
- Mostovoj, K. See Chmelař, E.
- Moszew, J. See Dziewoński, K.
- Moszkowska, A., folliculin and the masculinisation factor, A., 667. Masculinising action of anterior pituitary extracts on recently castrated male guinea-pigs, A., 667. Alkaline extracts of the posterior lobe of ox pituitary, A., 1284. Luteinising principle of the posterior lobe of the pituitary, A., 1284.
- Mothes, K., and Specht, W., sulphur metabolism of plants, A., 553.
- Motika, J. See De Châtel, A.
- Motley, H. L. See Ellis, M. H.
- Motoc, D. See Zaharia, A.
- Motoki, H. See Yasui, Takaji.
- Motor-Vita Corporation. See Kennedy, A. M.
- Mott, N. F., transition metals on the basis of quantum mechanics, A., 1063.
- and Zener, C., optical properties of metals, A., 288.
- Mott, R. A., coke formation. XII. Coking properties of durain, B., 130. Use of coke for heating purposes, B., 292. Combustion of coke, B., 659.
- and Wheeler, R. V., coking the Barnsley seam, B., 339.
- Mott, R. C. See Gronningsater, A.
- Mottier, M., 4-chloro-2-nitro- and -2-amino-phenol, A., 744. New method of fission of certain ethers, A., 1119. Oxidation of cod-liver oil and rapid method of determining action of anti-oxidants, B., 237. Oxidation of cod-liver oil and rapid determination of anti-oxidant action of substances, B., 733.
See also Hefter, L.
- Motwani, D. C., and Wheeler, T. S., β -hydroxyethyl ethers of substituted phenols and related substances, A., 1247.
- Motz, G. See Paal, H.

- Motz, H. See Mark, H., and Trillat, J. J.
 Motz, L., and Schwinger, J., β -radioactivity of neutrons, A., 1441.
 Moubis, J. See Penning, F. M.
 Moubray, J. M., weeping-willow leaves as cattle feed, B., 428.
 Mougeot, A. See Loeper, M.
 Mougey, H. C. See Wirshing, R. J.
 Moukhtar, A. See Gracie, D. S.
 Moulds, L. de V. See Astin, S.
 Moullin, E. B., measurement of shot voltage used to deduce magnitude of secondary thermionic emission, A., 139.
 Moulton, H. R., and Amer. Optical Co., treatment of glass, (P.), B., 307.
 Moulton, S. A., and Crahan, P. F., recovery of alkali metals and by-products, (P.), B., 909.
 See also Crahan, P. F.
 Moulton, W. See McNabney, R.
 Mountain, E. D., bismuth minerals from South Africa, A., 956.
 Mountain Copper Co., Ltd. See Swift, T. B.
 Mouquin, H., and Cathcart, W. H., diffusion coefficients in alcohol-water mixtures, A., 1456.
 and Steitz, W. A., solution rates of zinc electrodes in acid solutions, A., 171.
 Moureu, H., and Hamblet, C., action of liquid ammonia on tantalum pentachloride, A., 1090.
 and Rocquet, P., action of liquid ammonia on phosphorus pentachloride, A., 945.
 Structure of phosphorus pentachloride and phosphorus pentamide, A., 1057.
 See also Matignon, C.
 Mouriquand, G., and Coeur, A., ascorbic acid of the adrenals and mortification, A., 1036.
 Edel, V., Coeur, A., and Joly, J., action of ascorbic acid in stages of experimental scurvy, A., 669.
 Sédallian, P., and Coeur, A., experimental diphtheric intoxication and ascorbic acid of the adrenals, A., 1527.
 Mourot, G., synthesis of creatinine and creatine during protein starvation, A., 242.
 Mousseron, M. See Godehot, M.
 Moustafa, A. H. I. See Gracie, D. S.
 Moutia, A., [report of] entomological division, B., 246.
 Mouzon, J. C., and Smith, N. H., ionisation of neon and argon by singly-charged magnesium ions, A., 1294.
 Mover, P. See Boyd, W. C.
 Mowry, H., and Camp, A. F., zinc sulphate as corrective for bronzing of tung trees, B., 603.
 Moxnes, N. H. See Engelstad, R. B.
 Moxon, A. L., and Franke, K. W., effect of certain salts on enzyme activity; effect of sodium selenate, selenite, selenide, tellurite, sulphate, sulphide, arsenite, and vanadate on rate of carbon dioxide production during yeast fermentation, A., 405.
 See also Franke, K. W.
 Moyano, J. F. F. See Del Fresno, C.
 Moyer, C. E., hardening of copper, (P.), B., 193.
 Moyer, H. V. See Caldwell, J. R., and Winter, P. K.
 Moyer, L. S., electrophoresis of sterols. II. Ergosterol. III. Cholesterol surfaces, A., 823. 1523. Surface composition of certain latex particles, A., 1180.
 Moyer, P. S., colloidal aluminium hydroxide, (P.), B., 227, 494.
 Moyses, A. V. See Lowe, C. W.
 Moyses, H. E., preservation of rubber-cement coated articles, (P.), B., 114.
 Mozgova, K. K. See Antipov, A. A.
 Moznette, G. F., control of pecan black aphid under orchard conditions, B., 74.
 Mozolowski, W. See Baranowski, T.
 Mrak, E., Fessler, J., and Smith, C., caffeic acid in prunes and its behaviour as a laxative principle, A., 1434.
 Smith, C., Fessler, J., Lambert, H., and Harper, T., effect of prunes and water extract of prunes on plasma-carbon dioxide-combining capacity and composition of urine when included in acid, neutral, and uncontrolled diets, A., 391.
 Smith, C., and Henriques, V., carbohydrates of dried Californian French prunes (prune d'Agén), B., 427.
 Mrgudieh, J. N. See Clark, G. L., and Schmitt, F. O.
 Mrozowska, I., intensity distribution in fluorescence bands of mercury vapour, A., 3.
 Mrozowski, S., absorption measurements in band spectra of zinc and cadmium vapours, A., 2. Hyperfine structure of the mercury hydride bands, A., 908, 1184.
 Muchina, Z. S., 8-hydroxyquinoline method of determining molybdenum in steels, B., 410.
 and Solotareva, N. V., volumetric determination of chromium, manganese, and vanadium in steel, using diphenylamine as indicator, B., 64.
 Application of perchloric acid to analysis of special steels, B., 64.
 Muckenfuss, A. M. See Du Pont de Nemours & Co., E. I.
 Mudd, S. See Joffe, E. W.
 Mudford, H. D. See Imperial Chem. Industries.
 Mudge, C. S., and Smith, F. R., relation of action of chlorine to bacterial death, A., 788. Germicidal action of chlorine, B., 128.
 Mudge, W. A. See Crawford, C. A.
 Mudrack, F., assimilative activity and growth of *Ficaria verna*, A., 548.
 Mühlbauer, F. See Hieber, W.
 Muehlberger, C. W., relative toxicological effects of synthetic ethanol and grain fermentation ethanol in blended whiskies, A., 1533.
 Muehler, L. E. See Eastman Kodak Co.
 Mühlhausen, C. See Krollpfeiffer, F.
 Mühlig, J. M., composition of Foureault glass, B., 22.
 Müller, A., and Clay, R. E., soldering molybdenum to copper, A., 189.
 Müller, Adolf, preparation of pimelic acid, A., 196. α -Dibromo-*n*-pentane, A., 844. Preparation of mercury diisobutyl, A., 967.
 and Dorfman, M., photo-oxidation of 2-benzylpyridine and papaverine, A., 366. Photochemical behaviour of pyridine, 2-benzylpyridine, papaverine, and some derivatives, A., 990.
 Müller, Alex., straight-chain- and the many-membered CH_2 ring-molecule, A., 957.
 Müller, Alexander, Walden inversion in the sugar group. I. Fission of 3:4-anhydro- β -methylhexoside, A., 964.
 Müller, Alfred. See Krollpfeiffer, F.
 Müller, Arno, viscosity, surface tension, and capillariscope behaviour of essential oils, B., 46.
 Müller, B. See Ehrenberg, P.
 Müller, D., non-production of acetonedicarboxylic acid from citrate by citricodehydrase, A., 401.
 Mueller, D. W. See Barton, H. A.
 Müller, E. (Schaffhausen), egg [content of egg] pastry, B., 570.
 See also Ackermann, D., and Veselý, V.
 Müller, Erich, cathodic film in electrolytic reduction of aqueous chromic acid solutions, A., 1330.
 and Adelsberger, A., volumetric determination of free acid in solutions of iron salts, B., 628.
 and Mehlhorn, K., electrolytic reduction of oxygen to hydrogen peroxide, A., 942.
 and Schwabe, K., limiting currents in anodic polarisation of metals in aqueous solutions. IV., A., 171.
 and Stein, Wilhelm, cathodic film in electrolysis of solutions containing chromate, A., 585.
 Müller, Erika. See Leithe, W.
 Müller, Ernst, and Zellner, J., phlobaphens. I. Acid phlobaphen of the Spanish (edible) chestnut, A., 906.
 Müller, Eugen, magnetochemical investigations of organic substances. III. Deeply coloured dimeric keten of W. Langenbeck, A., 1370.
 Gawlick, H., and Kreutzmann, W., Perkin synthesis. II., A., 344.
 and Illgen, R., stereoisomerism of azoxybenzene [derivatives]. V., A., 1489.
 and Müller-Rodloff, (Frl.) I., magnetochemical investigations of organic substances. I. and II. Existence of diradicals. V. Magnetic behaviour of porphyrin and porphyrindin. VI. Determination of degree of dissociation of hexa-aryl substituted ethanes, A., 689, 1116, 1453.
 Müller-Rodloff, (Frl.) I., and Bunge, W., magneto-chemical investigations of organic substances. IV. Magnetic behaviour of free radicals, A., 1453.
 Müller, E. A. W., investigations in the ultra-soft X-ray region. I. Spectrograph for relative measurements, A., 1217. Preparation of the sample in X-ray emission spectroscopy, A., 1340.
 Mueller, E. F., and Stimson, H. F., temperature-control box for saturated standard cells, A., 188.
 Müller, E. J., *N*-dihydrobenzanthrone-azine, A., 95.
 See also Scholl, R.
 Müller, E. W., and Buchholtz, H., rusting and scaling of constructional steels under tensile stresses, B., 855.
 Müller, Erwin W., photographic measurement of intensities of spectral lines, A., 1475.
 Müller, Friedrich, and Dürichen, W., sensitive method of measuring the e.m.f. of high-resistance [galvanic] elements, A., 1097. Significance and principles of electrostatic e.m.f. measurements with the help of electron tubes, A., 1217.
 See also Riesenfeld, E. H.
 Müller, Fritz (Wien). See Weiss, R.
 Müller, Fritz (Zurich), absorption by metastable thallium atoms, A., 424. Vapour-pressure curve of thallium at very small vapour densities, A., 438.
 Müller, F. H., dipole moment of heavy water, A., 148.

- Müller, *F. H.*, and *Mortier, P.*, dielectric properties of alcohols and ether in various solvents, A., 817.
- Müller, *G.* See *Milone, M.*
- Mueller, *G. J.*, integrating α -ray photometer for X-ray crystal analysis, A., 1340.
- Mueller, *G. S.* See *Electrical Res. Products.*
- Müller, *G. W.*, uranium dioxide equalising resistances, B., 639.
- Müller, *H.* (Hamburg), production of water-gas from brown coal in the Pintsch-Hillebrand generator of the Hamburg gasworks, B., 756.
- Müller, *Hans*, and Müller, *Werner*, ageing of mineral lubricating oils and the resultant products, B., 8.
- Müller, *Hans* (Cambr. Mass.), Weiss law for Rochelle salt, A., 12. Properties of Rochelle salt, A., 14. Rochelle salt, A., 288. Photo-clastic effect of cubic crystals, A., 1059. Electrokinetic potential and the stability of colloids, A., 1075.
- Müller, *Heinrich.* See *Bennek, H.*
- Müller, *Hellmut* (California), chemistry and toxicity of mussel poison, A., 527.
- Müller, *Hellmut* (Leipzig), mechanism of the diacetyl reaction, A., 1126.
- Müller, *Herbert.* See *Necke, A.*, and *Schmidt, P.*
- Müller, *Hermann.* See *Hesse, E.*
- Müller, *H. G.* See *Minkowski, R.*
- Müller, *J.*, welding of hard steels, B., 677.
- Müller, *Jakob*, and *Pilat, S. von*, petroleum asphalt containing paraffins, B., 535.
- Müller, *Josef*, high-percentage per-compounds, (P.), B., 305.
- Müller, *Julius*, relation of the reductase test to bacterial content of milk, A., 884.
- Mueller, *J. H.*, methionine as an impurity in natural leucine preparations, A., 536. Cultural requirements of bacteria. IV. Quantitative determination of bacterial growth. V. *Diphtheria bacillus*, A., 1168, 1170.
- Müller, *M.*, ergosterol and dehydroergosterol, A., 487. Vitamin-D and its thermal and photochemical reaction products, A., 1037.
- Mueller, *M. L.*, dry kiln [for timber], (P.), B., 1097.
- Müller, *O.* See *Fichter, F.*
- Müller, *O. H.*, polarographic studies with the dropping mercury cathode. I. Secondary or catalytic effects in heavy water, A., 1208.
- See also *Heyrovský, J.*
- Müller, *R.* See *Gerlach, Werner.*
- Müller, *Reinhard*, *Eitel, H.*, and *Loeser, A.*, thyrotropic activity of pituitary gland in man, A., 1544.
- Müller, *Robert* (Graz). See *Becker, L.*
- Müller, *Robert* (Loeben), physico-chemical characteristics of light metals, B., 771.
- Müller, *R. H.*, photo-electric colorimetry in micro-analysis; photo-electric methods in macro- and micro-analysis, A., 1097. Spectrophotometric determination of manganese in steel, B., 1047.
- Müller, *R. L.*, and *Markin, B. I.*, electrical conductivity of borate glasses of low alkali content, A., 567.
- See also *Markin, B. I.*
- Müller, *R. W.*, aluminium [vessels] in bleaching processes with hydrogen peroxide, B., 301. [Use of] nickel and its alloys in refining of crude petroleum, B., 886. Nickel and its alloys in the petroleum refinery, B., 1098. Nickel-plating of aluminium, B., 1147.
- Müller, (*Mrs.*) *T.*, sheet material from [urea-formaldehyde] artificial plastic masses, (P.), B., 69.
- Müller, *W.* (Göttingen). See *Tammann, G.*
- Müller, *Walter.* See *Trautz, M.*
- Müller, *Werner.* See *Müller, Hans.*
- Mueller, *Wilhelm*, mechanical furnace for roasting sulphurous ores, (P.), B., 555.
- Müller, *Wilhelm* (Basle). See *Ruggli, P.*
- Müller, *Wilhelm* (Freiburg), frictional dispersion of polar solutions with short electric waves, A., 1318.
- Müller, *Wilhelm* (Giessen). See *Behagel, O.*
- Müller, *W. J.*, theory of passivity. XXVI. Limiting current for anodic polarisation of metals in water solution, A., 306. Detoxication of [coal] gas, B., 612.
- [with *Freissler, H.*, and *Plettinger, E.*], electrochemical anodic behaviour of alloys, A., 1467.
- and *Hering, O.*, theory of passivity. XXVII. Time phenomena in the anodic polarisation at smooth platinum in 2*N*-sulphuric acid, A., 1079.
- and *Löw, E.*, existence of an oxide film on gold, A., 831. Passivity of gold, A., 1326.
- and *Machu, W.*, theory of passivity. XXVIII. Anodic behaviour of iron in sodium chloride and hydrochloric acid solutions, A., 1326.
- Müller-Neuglück, *H. H.*, gas-analysis apparatus, B., 530.
- See also *Ammer, G.*
- Müller-Rodloff, (*Frl.*) *I.* See *Müller, Eugen.*
- Münch, *A. P. W.*, and *Heukers, R. T.*, determination of naphthalene by means of picric acid, B., 1129.
- Münch, *C.* See *Atlas-Ago A.-G.*
- Münch, *M.*, stability and colloid-protective action of new textile acids, B., 1090. Fatty acid condensation products versus fatty alcohol sulphonates [as textile detergents], B., 1090.
- Münster, *C.*, and *Szivesy, G.*, dispersion of optical activity of quartz in directions inclined to the optical axis, A., 435.
- Münzberg, *F. K.* See *Haurowitz, F.*
- Münzinger, *W. M.*, coating of rubber or rubberised surfaces, (P.), B., 278.
- Muilenburg, *G. A.* See *Cullison, J. S.*
- Muir, *A.*, soils of the Teindland State forest, B., 420.
- Muir, *G. W.* See *Watson, Cyril J.*
- Muir, *K. B.*, and *Becker, S. W.*, influence of drugs used in antisiphilitic therapy on the reticulo-endothelial system, A., 531.
- Muir, *W.* See *Kermack, W. O.*
- Muir, *W. R.* See *Ling, A. W.*
- Muiskin, *B.*, increasing throughput of asphalt stills, B., 1028. Preheating of stored oil products by hot water admitted at the bottom of the tanks, B., 1032.
- Mukherjee, *B.* See *Goswami, M.*
- Mukerji, *B.*, and *Dyke, H. B. van*, effect of the pressor principle of the posterior lobe of the pituitary body on the liver-fat after the feeding of choline chloride, A., 902.
- Mukerji, *B. L.* See *Dhar, N. R.*
- Mukerji, *J. N.*, report of Imperial agricultural chemist, B., 514.
- Mukerji, *S. K.*, Raman spectra of deca- and tetra-hydronaphthalene, A., 11, 914.
- Mukherjee, *G. K.* See *Neogi, P.*
- Mukherjee, *Jatindra Nath.* See *Bamann, E.*
- Mukherjee, *Jnanendra Nath*, and *Chaudhury, S. G.*, effect of aggregation on the cataphoretic velocity of colloidal particles, A., 1202.
- Mitra, *R.*, and *Bhattacharya, A. K.*, measurement of the absolute rates of migration of ions by the method of moving boundaries. I., A., 825.
- and *Mukherjee, Sudhamoy*, electrical properties of colloidal solutions. V., A., 1202.
- Raychoudhury, *S.*, *Mukherjee, Sudhamoy*, and *Majumdar, B.*, nature of reactions responsible for soil acidity. III., B., 163.
- Mukherjee, *Sudhamoy.* See *Mukherjee, Jnanendra Nath.*
- Mukherji, *K. C.* See *Budhalakoti, C. D.*
- Mukherji, *S. K.* See *Dhar, N. R.*
- Mukherji, *S. N.* See *Chopra, R. N.*
- Mukhopadhyay, *B. K.*, and *Tampy, K. K.*, determination of mechanical wood pulp, unbleached chemical pulp, and bleached chemical pulp fibres in paper and pulp, B., 986.
- Mukoyama, *M.*, equilibrium in removal of phosphorus from electric pig iron, B., 676.
- Mulder, *A. G.*, *Amberson, W. R.*, *Steggerda, F. R.*, and *Flexner, J.*, oxygen consumption with hæmoglobin-Ringer solution, A., 878.
- See also *Amberson, W. R.*, and *Evans, Charles Lovatt.*
- Mulder, *H.* See *Backer, H. J.*
- Mulinos, *M. G.*, and *Osborne, R. L.*, physiological activity of pyrocatechol derivatives, A., 1412.
- Mullady, *R. E.* See *Andrews, A. I.*
- Mullen, *E. J.* See *Gen. Chem. Co.*
- Muller, *E. G., jun.* See *Kelley, E. G.*
- Muller, *E. M.*, emulsions of edible fatty oils, (P.), B., 160.
- Muller, *G.*, oxidation of mineral oils by gaseous oxygen at moderate temperatures, B., 709.
- Muller, *H.*, lowering of the ice+potassium sulphate eutectic point, A., 824. [Formula of] hydrofluoric acid, A., 945.
- See also *Alles, G. A.*
- Muller, *J. A.*, and *Peytral, (Mlle.) E.*, variation of reaction velocity with temperature, A., 1082. Reactions between oxalic and permanganic acids in presence of dilute sulphuric acid, and the velocities of these reactions, A., 1084.
- Muller, *O. F.*, and *Nyanza Color & Chem. Co., Inc.*, dressing and treating [softening and waterproofing] furs, (P.), B., 98.
- Muller, *W. G.* See *N. V. Internat. Alfolaats.*
- Mulligan, *B. O.* See *Ogilvie, L.*, and *Walton, C. L.*
- Mulliken, *R. S.*, electroaffinity scale, with data on valency states and on valency ionisation potentials and electron affinities, A., 15. Structure, ionisation, and ultra-violet spectra of methyl iodide and other molecules, A., 562. Electronic structures of molecules. VI. Method of molecular orbitals. VII. Ammonia and water type molecules and their derivatives. VIII. Ionisation potentials. IX. Methane, ethane, ethylene, and acetylene. X. Aldehydes, ketones, and related molecules. XI. Electroaffinity, molecular orbitals, and dipole moments. XII. Electroaffinity and molecular orbitals, polyatomic applications. XIII. Diborane and related molecules, A., 1057, 1188, 1306, 1452.

- Mulliken, S. P., and Wakeman, R. L., determination of unsaturation in aliphatic hydrocarbons by bromide-bromate titration, A., 324. Relation between structure of hydrocarbons and their miscibility with selective solvents, A., 694. Procedure for classification of hydrocarbons, B., 837.
- Wakeman, R. L., and Gerry, H. T., preparation of alkenes, alkadienes, and alkynes, A., 1318.
- Mullin, M. J., sewage-disposal plant, (P.), B., 1072.
- Multigraph Co., and Rowell, G. S., compositions for treating planographic printing plates, (P.), B., 751.
- and Westcott, W. B., compositions for treating planographic printing plates, (P.), B., 751.
- Mumbrauer, R., investigation of hydrate dehydration by emanation method, A., 447.
- See also Born, H. J.
- Mumford, S. A. See Phillips, J. W. C.
- Mumm, O., and Bruhn, C., action of cyanogen iodide on quinolines, A., 356.
- Ludwig, Hans, Lu, D. H., and Radenhausen, R., quinoline dicyanide; stereochemistry of tervalent nitrogen, A., 92.
- Munch, H. C. See Hartung, W. H.
- Munch, J. C., saliva tests. II. Heroin. III. Detecting administration of some opium derivatives to horses, A., 397, 1274.
- and Krantz, J. C., jun., pharmacological and chemical studies of the digitalis group. I. *Adonis*, *Apocynum*, and *Convallaria*, A., 117.
- and Pratt, H. J., alkaloidal reagents. V. Aconite alkaloids, A., 102.
- and Ward, J. C., alkaloidal reagents. VII. Detection of thallium, A., 950.
- See also Miller, E., and Ward, J. C.
- Munch, R. H., gaseous discharge tube designed as an intense source of continuous ultra-violet radiation, A., 1475.
- Munday, J. C. See Morgan, J. J.
- Mundey, A. H., die casting in yellow metals, B., 411.
- Mundt, H. See Biltz, H.
- Mundy, C. W. A., [linseed] oil refining, with special reference to varnish oils, B., 813.
- Munilla, A. See Varela-Fuentès, B., and Vilar, J.
- Munn, R. J., putting the varnish laboratory batch into production, B., 366.
- Muñoz, J. D., manuring of newly cultivated soils. X. Spain, B., 515.
- Muñoz, J. M., determination of fluorine in potable waters, B., 1024.
- Munro, J., and Percival, E. G. V., monomethylhexoses. I. Constitution of the supposed 4-methylglucose, A., 1108.
- Munro, L. A., and Horn, W. R., catalytic dehydration of ethyl alcohol by alumina. I. Effect of the water content of the catalyst, A., 1210.
- and McCubbin, J. W., adsorption and catalysis. I. Carbon disulphide-water reaction, A., 160.
- Munro, M. P. See Schroeder, E. F., and Woodward, G. E.
- Munro, W. F. See Olin, H. L.
- Munro, W. P., induction period in oxidation of propane, A., 938.
- Munroe, C. E., and Tiffany, J. E., testing permissible explosives, B., 751.
- Munroe, T. B., and Coulter, M. D., [insect- and fungi-toxic] fibre products, (P.), B., 448.
- Munsell, J. D. See Morgulis, S.
- Munsey, V. E., flour bleaching, B., 1018.
- Munson, E. L., and Amer. Brass Co., copper-alloy welding rod and its use, (P.), B., 1051.
- Munson, J. J., and Pace, G. L., gas-agitated crystallising and curing tank, (P.), B., 977.
- Munteanu, N. See Popoviciu, G.
- Munter, C. J., and Bell, E. B., applications of sodium metaphosphate to textile processes, B., 800.
- Munters, C. G., heat-insulation [elements], (P.), B., 2. Heat insulation [for refrigerator cabinets], (P.), B., 85, 931. Heat-insulation, (P.), B., 754. Insulation for cold- or heat-retaining cabinets, (P.), B., 755.
- Muntsch, O., blood changes in "mustard-gas" poisoning as an aid in diagnosis, A., 398.
- Muntwyler, E., and Binns, D., effect of cyanide and other substances on oxygen uptake of rat tissue, A., 119.
- Munz, T. E. See Buss, O. F.
- Murakami, M., and Irie, Toshi, constitution of flavugetin. II., A., 220. Synthesis of flavonol and of dihydroflavonol, A., 1128.
- Murakami, S., action of hexenol from tea leaves. I., A., 1159.
- Murakami, T., and Morioka, S., effect of heat treatment on corrosion of magnesium-zinc and -aluminium alloys, B., 65.
- Murakawa, K., spark spectrum of chlorine (Cl II), A., 1291. Spectrum of mercury in the photographic infra-red, A., 1292.
- Muralt, A. von, transparency and action metabolism of muscle. II., A., 388.
- Muraoka, S., perfusion of the stomach. VIII. Fission of arginine, A., 1152.
- Muraour, H., theory of explosive reactions, B., 335.
- and Aunis, G., calculated and experimental pressures for explosive mixtures producing a gas rich in water vapour, B., 831.
- and Michel-Lévy, A., origin of luminosity which accompanies detonation of explosives, A., 713. Influence of nature of surrounding gas on luminosity associated with detonation of explosives, B., 1070.
- and Schumacher, W., rate of combustion of [explosive] colloidal powders in inert atmospheres under atmospheric pressure, B., 526.
- Muraschov, A. V., determination of coefficient of friction, B., 257.
- Murata, F., reduced glutathione in thymus gland and testicles of young and full-grown rabbits, A., 511. Cholesterol and reduced glutathione contents in blood of rabbits immunised with typhoid bacilli, A., 536. Reduced-glutathione contents in an incubated egg and in the organ tissues of a chick and the effect of sodium glutamate on their glutathione contents, A., 1398.
- Murata, Kiichi. See Sato, Masayoshi.
- Murata, Kuanzi, thermodynamic study of fundamental corrosion reactions of iron with hydrogen under pressure, A., 584.
- Murata, M., fish-net preservatives. I. Preservatives mixed with antiseptic metallic compounds. II. and III. Oily preservatives mixed with copper compounds, B., 1038.
- Murata, M., and Masumori, K., effect of method and degree of refining on properties of polymerised [fish] oil. I.—III., B., 560.
- Murata, Y. See Tsuneoka, S.
- Murek, K., and Brunning & Co., Inc., C., photographic line-printing, (P.), B., 1119.
- Murdock, C. C., multiple Laue spots, A., 1306.
- Murdock, H. R., evaluation of heat input into alkaline pulping digesters, B., 489.
- and Champion Fibre Co., treating sulphite pulp, (P.), B., 448.
- Murer, H. K. See Hodgson, R. E.
- Murgatroyd, F., Russell, H., and Yorke, W., chemotherapy. XI. Trypanocidal titre of rabbit serum after intravenous injection of compounds of arsenic, A., 537.
- See also Yorke, W.
- Murgatroyd, J. B. See Gooding, E. J.
- Murgulescu, I. G. See Candea, C., and Spacu, G.
- Murlin, J. R. See Nasset, E. S., and Pierce, H. B.
- Murneek, A. E., physiological rôle of asparagine and related substances in nitrogen metabolism of plants, A., 1547.
- Muro, Z., difference in X-ray diffraction patterns of isomerides, A., 921.
- Murooka, T., potentiometric titration of hyposulphite, A., 1337.
- See also Ishikawa, F.
- Murphy, A. R. See Du Pont de Nemours & Co., E. I.
- Murphy, D. W. See Chipman, J.
- Murphy, Edward A. See Dunlop Plantations, Ltd.
- Murphy, Elizabeth A. See Evans, H. M.
- Murphy, E. J. See Mitchell, A. C. G.
- Murphy, G. B. See Lowry, C. D., jun.
- Murphy, H. C., effect of crown rust on yield, water economy, and composition of oats, A., 798.
- Murphy, H. F., salt content of soils near Salt Plain in Alfalfa County, Oklahoma, in relation to crop production, B., 164.
- and Daniel, H. A., chemical and physical properties of normal and solonch soils and their relation to erosion, B., 819.
- See also Harper, H. J.
- Murphy, N. F. See Bancroft, W. D.
- Murphy, P., self-defence against industrial gases, B., 575.
- Murphy, P. A. See Hughes, W.
- Murphy, W. S. See Koppányi, T.
- Murray, A. See Eastman Kodak Co., and Kodak, Ltd.
- Murray, A. L., forming cement-receptive backing for rubber soles, (P.), B., 197. Attaching surfaces by rubber, (P.), B., 370.
- Murray, C. See Wilcke, H. L.
- Murray, D. S., staphylococcus toxoid, A., 536.
- Murray, H. A., jun. See Du Pont de Nemours & Co., E. I.
- Murray, H. D., Baines, H., Grist, R. A. S., and Dufaycolor, Ltd., colour photography, (P.), B., 1070.
- Murray, H. L. See Murray Deodorisers.
- Murray, J. V., and Cloke, J. B., formation of glycidamides [α -oxidopropionamides] by action of hydrogen peroxide on α -ethylenic nitriles, A., 212.
- Murray, J. W., Raman spectrum of $\Delta^{1,3}$ -cyclohexadiene, A., 281.
- and Andrews, D. H., Raman spectrum of fluorobenzene, A., 146.

- Murray, J. W., Deitz, V., and Andrews, D. H., studies with vibrating mechanical models. II. The series $C_6H_5Cl-CCl_2Cl_3$, A., 568.
- and Gordon, N. E., dissociation constants of chlorophenols, A., 302.
- Murray, L. W. See Seabury, R. L.
- Murray, M. M. See Bowes, J. H.
- Murray, P. D. F., fibrillation in the chicken embryo heart *in vitro*. I. Effects of excess potassium, calcium, magnesium, and sodium, and of high and low osmotic pressures. II. Character and mechanism of the fibrillation, A., 247.
- Murray, R. C., and Hartley, G. S., equilibrium between micelles and simple ions, with reference to solubility of long-chain salts, A., 299.
- Murray, R. K. S., sulphur-dusting treatment for *Oidium*, B., 822.
- Murray, R. M. See Gardner, J. A.
- Murray, T. B., rodent control, B., 248.
- Murray, T. F., *jun.* See Eastman Kodak Co.
- Murray, W. S., Gray, D., and Oneida Community, Ltd., electroplating bath [for indium], (P.), B., 1000.
- See also Gray, D.
- Murray Co., B. A. See Spokes, R. E.
- Murray Deodorisers, Ltd., and Murray, H. L., pasteurising and deodorising lacteal liquids, (P.), B., 78.
- Murrell, F. C. See Wesson, L. G.
- Murri, I. K., and Kudrjavezva, A. V., influence of treating berries and fruits on potency of vitamin-C, B., 428.
- Onokhova, N. P., Kudrjavezva, A. V., and Gutzevich, G. K., influence of freezing and preservatives on vitamin-C, B., 428.
- Murthi, D. S. See Krishnaswami, K. R.
- Murti, C. N., and Husain, S., double compound of stannic chloride and acetic acid, A., 1333.
- Musajo, L., xanthurenic acid. I. and II., A., 1007, 1268.
- and Chiancone, F. M., xanthurenic acid. III. Origin of xanthurenic acid, A., 1007.
- Musakin, A. P., colorimetric determination of aluminium by aid of alizarin S, A., 464.
- Musante, C., preparation of acetylenedicarboxylic acid from fumaric acid, A., 846.
- See also Karrer, P.
- Musatti, I., and Reggiori, A., apparatus for [creep] tests at high temperatures and resistance of some steels to creep, B., 230. Metallographic and mechanical properties of electric-arc welds, B., 594.
- Muschkatblat, M. M., and Bruskin, I. M., apparatus for uninterrupted p_H determination, A., 189.
- Musgrave, G. W., infiltration capacity of soils in relation to control of surface runoff and erosion, B., 917.
- Musher, S., cereals and seeds inhibit rancidity in lard, B., 683.
- Musierowicz, A., Nowotny, F., and Jaworski, R., dynamics of Polish soils, B., 964.
- Muskat, I. E., reactions of carbohydrates in liquid ammonia. II. Apparatus and methods; alkyl, acyl, and metallic and non-metallic derivatives of diisopropylideneglucose, A., 68. Mechanism of Walden inversion in sugars; inversion of rhamnose *p*-toluenesulphonates, A., 199.
- 6-Deoxy-d-glucose, A., 734.
- Mussehl, F. E., and Ackerson, C. W., utilisation of protein concentrates by the growing chick, A., 1272.
- Musser, R. See Krantz, J. C., *jun.*
- Mussnug, G., fineness of grinding and lime saturation of [Portland cement] clinker, B., 1143.
- Musso, L., recovery of volatile solvents, B., 137.
- Mustel, E. R. See Gorbatshev, S. V.
- Muszkat, K., synthesis of liquid hydrocarbons from water-gas, B., 132.
- Muth, F., and Malsch, L., establishment of a nitrogen balance in grape musts and wines, B., 376.
- Muto, T., diamagnetism of the Dirac electron. II., A., 1187. Metallic absorption of light, A., 1310.
- Mutsaers, W., production of immune serum by injection of cholesterol adsorbed on kaolin, A., 1519.
- Mutschin, A., cyanide-formaldehyde reaction, and new volumetric analytical applications, A., 183.
- See also Kurtenacker, A.
- Mutter, E. See Standard Oil Development Co., and Stenger, E.
- Mutual Chemical Co. See Tarr, O. F.
- Mutual Citrus Products Co., Inc., press and filter, (P.), B., 787. Pectous material, (P.), B., 923.
- Muus, (Miss) J., carbon dioxide cleavage from dibromomalonic acid, A., 709.
- Myatelin, P. See Komlev, L. V.
- Mycalex (Parent) Co., Ltd. See Wedlock, A. W. H.
- Mydans, W. E. See Conant, J. B.
- Myddleton, W. W. See Aicher, A.
- Myers, A. E., and Beckman, A. O., mercury-sensitized decomposition of azoimide, A., 311.
- Myers, C. N., Gustafson, F., and Thorne, B., determination and recognition of lead in biological tissues and fluids, A., 1552.
- Myers, D. N., bituminous emulsions, (P.), B., 214.
- Myers, E. G., and Myers-Sherman Co., hammer mill, (P.), B., 178.
- Myers, F. E., Byrne, J. F., and Cox, R. T., diffraction of electrons as a search for polarisation, A., 4.
- Myers, H. E., effect of chemical soil treatments on root, crown, and shoot rot of milo, B., 167.
- Myers, L. D. See Reddish, W. T.
- Myers, R. D., drying of solids [e.g., hexachloroethane], (P.), B., 531.
- Myers, R. H., marine corrosion [of steel]. III. Examinations of steel pontoons supporting the landing stage at Gosport, B., 635.
- See also Hudson, J. C.
- Myers, R. P., and Mauer, J. C., germicidal properties of water containing minute amounts of silver, B., 528.
- Myers, V. C., Remp, D. G., and Bing, F. C., haemoglobin production in rats on diets containing bread, A., 1271.
- Myers, W. A., and Atlantic Refining Co., separation of liquids from vapours or gases, (P.), B., 1076.
- Myers, W. K., and Keefer, C. S. [with Grinnan, A. B.], relation of plasma-proteins to ascites and oedema in cirrhosis of liver, A., 643.
- Keefer, C. S., and Holmes, W. F., *jun.*, characteristics of synovial fluid in gonococcal arthritis, A., 381.
- See also Holmes, W. F., *jun.*, and Keefer, C. S.
- Myers-Sherman Co. See Myers, E. G.
- Myerson, A. See Dameshek, W.
- Myhren, A. J. See New Jersey Zinc Co.
- Myrbäck, K., cozymase. V. VII. From animal organs. IX. Oxidation and reduction, A., 782, 1278.
- and Örtenblad, B., cozymase. IV. VI. Preparation and properties of highly active cozymase. VIII. Action of adenylic acid deaminase on cozymase, A., 782, 1278.
- Mystkowski, E. M., nephelometric investigation of protein solutions. II., A., 270. Polysaccharoproteins. V. State of glycogen in muscle, A., 1004.
- See also Przylecki, S. J. von, and Rafalowska, H.

N.

- Naamlouze Vennootschap Bataafsche Petroleum Maatschappij. See under Bataafsche Petroleum Maatschappij.
- N. V. Bataviasche Volks- & Stadsapotheek. See Baak, J. van.
- N. V. Chemische Fabriek "Servo," and Rozenbroek, M. D., treatment of textile and other fibrous materials, (P.), B., 145. Cold-soluble starch products, (P.), B., 970.
- N. V. Hollandsche Maatschappij voor de Vervaardiging van Glas, and Halbach, H. L., tanks for manufacture of glass, (P.), B., 454.
- N. V. Industriële Maatschappij voor Noury & van der Lande, yeast, (P.), B., 824. Alkali perborates, (P.), B., 1142.
- N. V. Internationale Alfol-Maatschappij, and Müller, W. G., heat- and sound-insulation, (P.), B., 497.
- N. V. Koninklijke Pharmaceutische Fabrieken voorheen Brocades-Stheeman & Pharmacia, bands, thread, etc., from animal fibres, (P.), B., 58. Threads, strings, bands, films, etc., from elastin- and collagen-containing materials, (P.), B., 300. Threads, strings, bands, films, etc., from animal fibres, (P.), B., 300.
- N. V. Koninklijke Vereenigde Tapijfabrieken, cleaning composition and processes for using the same, (P.), B., 98.
- N. V. Maatschappij tot Beheer & Exploitatie van Octrooien, fibres and threads from glass, slag, and similar metable materials, (P.), B., 591. Ceramic-like articles, (P.), B., 631.
- N. V. Maats. tot Exploitatie van "ten Bosch Octrooien," briquettes from normally non-coherent substances, in particular from coal dust, lignite dust, etc., (P.), B., 662.
- N. V. Maaschierien-en Apparaten Fabrieken "Meaf," recovery of volatile hydrocarbons from gases and regenerating the wash oil, (P.), B., 662. Removal of carbon disulphide from gases, (P.), B., 1126.
- N. V. Molybdenum Co., and Schwarzkopf, P., composite structural material and shaped articles made therefrom, intended more particularly for electrical purposes, (P.), B., 810.
- N. V. Nieuwe Octrooi Maatschappij, and Colony, M. W., conversion of hydrocarbon compounds in vapour phase by heating, (P.), B., 441.
- and Sachs, A. P., cracking of hydrocarbon oils, (P.), B., 440.
- N. V. Philips' Gloeilampenfabrieken, incandescence cathodes, (P.), B., 108, 1001. [Coiled helical] incandescence filaments for electric incandescence lamps or discharge tubes, (P.), B., 108.

- N. V. Philips' Gloeilampenfabrieken, impregnation of layers of fibrous material with synthetic artificial resin, (P.), B., 450. Photo-electric electrodes, (P.), B., 639. Electric-discharge tubes filled with metal vapour, (P.), B., 682. [Diazo-type] photographic processes and materials therefor, (P.), B., 702. Mirrors, (P.), B., 769. Electric-discharge tubes, (P.), B., 812, 1101. Electron-emitting electrodes for electron-discharge tubes, (P.), B., 958. Production of photographic contrasts by means of naphthalenediazonium compounds, (P.), B., 975. Layers containing light-sensitive diazonium compounds, (P.), B., 1023. Production of negative photographic prints by means of diazonium compounds, (P.), B., 1070. Device for testing materials for fastness to light, (P.), B., 1101. [Insulating bush for] electrolytic cells, (P.), B., 1101.
- N. V. Stikstofbindingsindustrie "Nederland," alkali sulphides, (P.), B., 146.
- N. V. tot Voortzetting der Zaken van P. Schoen & Zoon, plastic-elastic binding material for road surfaces, floors, tiles, etc., (P.), B., 675. Preparation of binding agent for [chlorinated rubber] paints or lacquers, (P.), B., 1056.
- Nabar, G. M., influence of vat dyes on hypochlorite oxidation, B., 301. See also Turner, H. A.
- Nabar, M. V., and Wheeler, T. S., kinetics of heterogeneous organic reactions: reaction between benzyl chloride and solid silver nitrate, A., 1466.
- Nachmansohn, D., Wajzer, J., and Lippmann, R., effect of adrenaline on the metabolism of isolated muscle, A., 1031.
- Nachtman, J. S., and Thomas, C. G., electro-pickling of metal [steel], (P.), B., 315.
- Nacken, M., variation of mass of electrons in rapid cathode rays, A., 1047.
- Nacken, R., action of water on tricalcium silicate ($3\text{CaO} \cdot \text{SiO}_2$), B., 1096. and Mosebach, R., system $\text{CaO}-\text{SiO}_2-\text{H}_2\text{O}$, A., 935.
- Nad, M. M. See Kotscheschkov, K. A.
- Nadeau, A. See Bois, E.
- Nadeau, G. F. See Eastman Kodak Co.
- Nadkarni, D. R., benzoin reaction. III. Effect of water, A., 1084. and Mehta, S. M., benzoin reaction. II. Negative catalysis, A., 1084. Mehta, S. M., and Wheeler, T. S., benzoin reaction. I. Reaction between pure benzaldehyde and pure potassium cyanide, A., 938.
- Nadler, S. B. See Thompson, W. O.
- Nadson, G. A., and Stern, C., action at a distance of metals on germinating seeds, A., 1179.
- Naegeli, C., and Tyabji, A., reaction of aromatic carbimides with organic acids. II. Isolation of carbamic-carboxylic anhydrides, A., 336.
- Naehring, E., humus determination in sugar-beet soils, B., 646.
- Nähring, E. (Jena), change in width of X-ray interference lines of palladium when charged with hydrogen electrolytically, A., 16. Atomic scattering power of palladium for copper K-radiation, A., 272.
- Naeser, G., optical pyrometry, B., 529.
- Nag, N. C., significance of manganese in plants, A., 266.
- Nagai, C., synthetic production of ephedrine homologue[s] and its [their] salts, (P.), B., 782.
- Nagai, I. See Minatoya, S.
- Nagai, S., and Kosaki, Y., effects of fluorides on the thermal synthesis of calcium silicates. VI. and VII., A., 1035. and Matsuoka, K., expansion and corrosion of hardened mortar of various cements. I., B., 726. Ore cement or iron cement. III., B., 902. and Miyasaka, M., effect of fluorides on thermal synthesis of calcium silicates. III., A., 49. and Suzuki, Takamura, products of hydrothermal reaction on clayey substances. I., B., 1043.
- Yoshida, I., and Matsuoka, K., iron cement. I. and II., B., 496, 497. and Yoshiura, T., effects of fluorides on thermal synthesis of calcium aluminates. I. and II., A., 49, 830. Effect of calcium fluoride on thermal synthesis of calcium ferrites, A., 1329.
- Nagai, Yoshio. See Maki, T.
- Nagai, Yozaburo, and Isii, N., volatility of fuels containing ethyl alcohol. I. Partial pressures of ethyl alcohol-ethyl ether mixtures and calculation of heat of mixing therefrom. II. Calculation of starting temperatures of an engine using ethyl alcohol-ethyl ether mixture as fuel. III. Total and partial vapour pressures of mixtures of ethyl alcohol and cyclohexane. IV. Calculation of starting temperature of an engine when using ethyl alcohol-cyclohexane mixtures as fuel, B., 342, 484.
- Nagano, I. See Inokuty, H.
- Nagao, K., filtering apparatus, (P.), B., 434.
- Nagao, S., mutual displacement of glycogen and fat in liver cells, A., 1016.
- Nagao, T., perfusion of the stomach. VII. Formation of ketonic substances, A., 1152.
- Nagaoka, Hantaro, and Futagami, T., explosion spectrum of mercury compared with arc spectra under ordinary pressure and in a vacuum, A., 3. Excitation of the nebular line 4267 (C) in oxygen, A., 271. Characteristics of Pb I, II, III, IV lines revealed in instantaneous spectrograms, A., 676, 1046. and Machida, I., a method in micro-spectrometry and its accuracy, A., 465. and Mishima, T., isotope effect in the spectrum of neon. II., A., 136. Reversal of neon lines, A., 555. Coloration of compounds of different elements by cathode rays, A., 1446.
- Sugiura, Y., and Mishima, T., excitation of Balmer series by electrodeless discharge, A., 135. Excitation of Balmer series of hydrogen to high order of terms by electrodeless discharge, A., 555.
- Nagaoka, Hiroshi, relation between oxygen capacity and molecular state of haemoglobin, A., 1141.
- Nagaoka, Z., Yashiro, K., and Sato, Torawo, heat transfer for calcium chloride brine in pipes, B., 433. See also Inokuty, H.
- Nagasawa, J. See Uchida, S.
- Nagasawa, T., pyrethrum flowers. I. Analyses of mosquito-repelling incense and pyrethrum extract. II. Determination of the active principle, B., 1023.
- Nagatkin, I. G., accurate thermostat of small capacity, A., 319.
- Nagel, K. See Lange, E.
- Nagel, R. See Rosenthal, F.
- Nagel, R. H. See Groggins, P. H.
- Nagel, T., and Carburated Gas Inc., carburetted process, (P.), B., 343.
- Nagel, W., and Körnchen, M., detection of Congo copals, B., 599.
- Nagelvoort, A., and Delaware Chem. Eng. Co., treatment of coal, (P.), B., 393. Extraction of sulphur, (P.), B., 900.
- Nagle, J. C. See Valentin Ord & Nagle, Ltd.
- Nagorskaja, N. D., and Novoselova, A. V., equilibria in the system $\text{Na}_2\text{O}-\text{HF}-\text{H}_2\text{O}$, A., 935. See also Novoselova, A. V.
- Nagy, B. V. S., calculation of atom form factors, A., 679.
- Nagy, L., nicotine content of milk from women who smoke, A., 118.
- Nagy, M., silicotungstic acid reaction of cerebrospinal fluid, A., 1399.
- Nagy, V. L. See Bodnár, J.
- Naherniac, A., OH band in the very near infra-red, A., 1052. See also Costeanu, G.
- Nahigyan, K. K. See Daniels, F. H.
- Nahmias, M. E., attempt to detect the neutrino, A., 426.
- Nahoczky, A., metallurgical experiments with Hungarian aluminium-iron ores in crucible, open-hearth, and electric furnaces, B., 1046.
- Nahum, L. H., and Hoff, H. E., effect of injection of iodoacetic acid and sodium cyanide on the mammalian heart, A., 530. See also Himwich, H. E.
- Naidu, R., ionisation curves of Po α -rays in rare gases, A., 141.
- Naik, D. B. See Desai, H. N.
- Naik, Y. G. See Paranjpe, G. R.
- Naiman, B. See Bogert, M. T., and Harrow, B.
- Naiman, I. M., and Troitzky, N. D., action of nitrating acids on components of technical wood cellulose, B., 844.
- Nair, C. N., and Peacock, D. H., alkylation of acetoacetic ester by toluenesulphonic esters, A., 1242.
- Naito, I., decarburisation of white cast iron. I., B., 498.
- Naka, T. See Matsui, Moto'aro.
- Nakabayashi, M. See Araki, T.
- Nakae, D., and Nakamura, K., autoclave process of oil-splitting. I. Preliminary experiments, B., 276.
- Nakamura, K., and Nobori, H., autoclave process of oil splitting. III. Zinc white as catalyst, B., 317. and Nobori, H., autoclave process of oil-splitting. II. Magnesia as catalyst, B., 276.
- Norbori, H., and Sasada, S., autoclave process of oil splitting. IV. Successive hydrolysis, B., 597.
- Nakagawa, Haruo, molecular volume of carbamide in complex ions, A., 684.
- Nakagawa, Hideo, influence of chologogues on respiration of liver tissue, A., 116.
- Nakagawa, S. See Kikuchi, Seishi.
- Nakahara, H., mucilage of *Scaphium affine*, Pierre, A., 1180.
- Nakahara, W. See Inukai, F., and Suzuki, V.
- Nakahori, K., enzymes in uterine cancer. I. Amylase, A., 514.

- Nakai, T., and Fukami, Y., change of inner structure of quartz and of felspar heated at a high temperature, B., 901. Kaolin-quartz-felspar system after heat treatment, B., 901.
- Nakajima, K., and Kamata, T., determination of adhesive strength of plywood, B., 271. Proposition of "T.N.N." equations in the kinetics of enzymes, A., 1414.
- Nakajima, M., throwing power of zinc sulphate solutions, B., 502.
- Nakajima, T., cellulose and its derivatives. I.—VII., B., 221, 445.
- Nakamiya, Z., properties and physiological significance of biosterol. IX. Condensation of biosterol with maleic and citraconic anhydrides, A., 1176. Gadusene, an unsaturated hydrocarbon from animal and plant oils, A., 1264, 1398.
- Nakamoto, M., water in inorganic compounds. II. Water content of Odo acid clay at various temperatures in an air current at constant water vapour pressure, A., 1347.
- Nakamura, G., and Shidei, T., band spectra of elements of the fifth group, A., 555. The $^{11}\text{H} \rightarrow ^{12}\text{D}$ system of NH molecules, A., 561.
- Nakamura, H. See Bertrand, G.
- Nakamura, K. See Nakae, D.
- Nakamura, Kiyosi, variation of elastic constants of the metallic alloy Ni-Fe on magnetisation, A., 816. Effect of magnetisation on Young's modulus of elasticity of some ferromagnetic substances, A., 1311.
- Nakamura, Kozô. See Yamaguchi, K.
- Nakamura, M. See Hishiyama, K.
- Nakamura, O. See Nakashima, T., and Okada, S.
- Nakamura, S., anaerobic decomposition of hexosephosphoric acids by animal tissues. II. Methylglyoxal, A., 402.
- Nakamura, Yoshio. See Sômiya, T.
- Nakamura, Yukihiko, oxidation-reduction potentials. IV. Changes of these potentials in hydrolysis of fats and oils. V. Changes in hydrolysis of carbohydrates, A., 585.
- Nakano, T., pharmacological investigations of yolk-sac vessels of the chick embryo. I.—III., A., 893.
- Nakao, M., and Fukushima, T., composition of *Salvia miltiorrhiza*. I. (Chinese drug, tan-shin), A., 754.
- Nakao, T. See Sasaki, N.
- Nakashidze, B. M., analysis of natural gases and their helium content, B., 225.
- Nakashima, I., and Oinuma, S., bleaching of wood pulp. II., B., 95.
- Nakashima, M. See Tomita, M.
- Nakashima, T., and Matsushita, Y., comparison of various rayon and paper celluloses by means of the solubility curve, B., 718.
- and Negishi, M., thread-forming power of cellulose ester solutions, B., 719.
- and Saito, N., heat of solution and of swelling of cellulose derivatives. I. Calorimetric phenomena. II. Calorimetric determination of degree of solvation. III. Heat of solution of acetates, B., 844.
- Shibata, M., and Nakamura, O., influence of boiling on viscosity of nitrocellulose, B., 718.
- Nakata, N., structure of naphthalene nucleus, A., 1447.
- Nakatsuka, Y., and Iinuma, H., configuration of bisdimethylglyoximediamine cobaltic salts, A., 51.
- Nakaya, U., and Yamasaki, Fumio, application of the Wilson chamber to study of spark discharge, A., 557.
- Nakayama, S., diazo-urine. V. Small-pox urine. VI. Antoxyproteic acid, A., 1150. Chemistry of tubercular sputum, A., 1528.
- Nakazawa, Y. See Kaneko, Hideo.
- Nakhmanovitch, M. I., influence of drying conditions on beet pectin, B., 1014.
- Nakken, T. H., and Nakken Patents Corp., photo-electric tube, (P.), B., 193.
- Nakken Patents Corporation. See Nakken, T. H.
- Nalbandjan, A., combustion of $\text{H}_2 + \text{O}_2$ at room temperature in the presence of oxygen atoms, A., 1080.
- Nalder, M. E. See Poe, C. F.
- Netetkin, S. S., and Melnikov, N. N., organic compounds of thallium, A., 638. Organic derivatives of thallium. I. Determination of thallium in organic compounds. II. Reaction of thallium chloride with diazo-compounds, A., 1139.
- Sanin, P. I., and Rudakova, E. F., destructive hydrogenation of Kashpiratar, B., 53, 54.
- Sanin, P. I., and Tzuiba, A. N., desulphurisation of shale gasolines by catalytic hydrogenation at atmospheric pressure, B., 86.
- and Schavrigin, A. I., racemisation in the camphene transformation, A., 89. New homologues of the camphor group; propylcamphor and its derivatives, A., 625.
- and Zvorikina, V. K., neutral products of oxidation of petroleum hydrocarbons by atmospheric oxygen, B., 132.
- Namikawa, T., complete gasification of coal. VII. Effect of heating rate of coal on reactivity of coke towards steam. VIII. and IX. Effect of heating rate of coal on combustibility of coke, B., 1028.
- Nanfeldt, W., and World Bestos Corp., brake linings containing frictioning compounds, (P.), B., 211. Brake-lining compound, (P.), B., 931.
- Nanji, H. R. See Chinoy, J. J.
- Naoum, P., sensitiveness and brisance of commercial dynamites, B., 207.
- Naphtali, M., low-temperature tar from bituminous coal, B., 390.
- Napoli, M. See Nuzzi, P.
- Nara, G. See Asahina, T.
- Narang, K. S., and Ray, J. N., vasine, A., 995.
- See also Beri, M. L., Ghose, T. P., Juneja, H. R., and Ray, J. N.
- Narasimhamurthy, G. See Bhaskaran, T. R.
- Narasimhiah, G., refractivity of liquid mixtures, A., 24.
- Narath, A., ultra-short-time effect and its interpretation, A., 47. Investigation of photographic-photochemical processes with the aid of the electro-optical Kerr effect, A., 188.
- Náray-Szabó, S. von, and Szabó, Z., determination of ionic activities, A., 824.
- and Szlatinay, L., electrochemical behaviour of ammonium amalgam under pressure, A., 826.
- Narayana, N. See Niyogi, S. P.
- Narayana, T. S., Budde effect in iodine. I. Photo-expansion. II. Influence of temperature on photo-expansion, A., 279.
- Narayanamurti, D. S., photochemical reaction between ethylene iodide and iodine in carbon tetrachloride solution, A., 832.
- See also Ghosh, J. C.
- Narayanawamy, B. N. See Rau, M. A. G.
- Narayanawamy, L. K., photo-dissociation of single crystals of nitrates in polarised light, A., 1331.
- See also Krishnan, K. S.
- Narayanayya, Y. V., and Subrahmanian, V., determination of nitrogen [in soils], B., 514. Determination of nitrogen [in soil] by fumeless digestion. I., B., 1009.
- See also Bhagvat, (Miss) K., and Subrahmanian, V.
- Nargund, K. S. See Bhatt, C. T.
- Narita, Z. See Kondo, H.
- Narkevitch, M. M. See Kuzminich, I. N.
- Narkiewicz, H., semi-coking of coal in a laboratory continuous-action rotary oven, B., 130.
- Narkiewicz, W. G., polarisation of Raman radiation of *p*-, *m*-, and *o*-xylene, A., 1301.
- Narwani, C. S., chromatic emulsions. I. Preparation of stable chromatic emulsions of cod-liver oil. II. Theory of their stability from the viewpoint of viscosity and surface tension, A., 579.
- Nasakin, S. P., and Gordon, L. V., stability of wood as an insulating material for apparatus in the acetic acid industry, B., 806.
- Sanenkova, M. F., and Vschitzzev, S. N., influence of circulation of incondensable gases and tar on destructive distillation of wood, B., 659. Increasing yield of formaldehyde in the Krasno-Bakovski plant of the "trust" Atzetometil, B., 1036.
- See also Tscherniachovski, J. M.
- Nasch, L., formaldehyde in a solid state, (P.), B., 139.
- Nash, A. W., Howard, J. L., and Hall, F. C., action of the silent electric discharge on hydrocarbon gases and oils, B., 178.
- See also Fallah, R., and Hunter, T. G.
- Nash, H. E. See Hercules Powder Co.
- Nash, T. P., jun. See Laug, E. P.
- Nash, W. C., and Seaman Paper Co., [heat-insulating] paper, (P.), B., 721.
- Nasledov, D., and Nemenov, J., photo- and dark-conductivities of cuprous oxide, A., 1303.
- Nasset, E. S., and Parry, A. A., passage of fluid and certain dissolved substances through the intestinal mucosa as influenced by changes in hydrostatic pressure, A., 391.
- Pierce, H. B., and Murlin, J. R., proof of a humoral control of intestinal secretion, A., 1147.
- See also Pierce, H. B.
- Nastiukova, O. K. See Alpatov, V. V.
- Natanson, E. V. See Lainer, V. I.
- Natanson, G. L., microstructure of active and inactive iron nitrides, A., 812.
- Natelson, S., and Pearl, A. H., device for determining the surface tension of small amounts of liquid, A., 1342.
- and Sobel, A. E., removal of sterols from material containing vitamin-D, A., 903.
- Nath, N. S. N., normal vibrations of molecules having octahedral symmetry, A., 15. Dynamical theory of the diamond lattice. I.—III., A., 150, 1058, 1306.

- Nathan, E. See Kallós, P.
 Nathan, W. S. See Baker, J. W., and Watson, H. B.
 Nathanson, M. H., action of acetyl- β -methylcholine on ventricular rhythms induced by adrenaline, A., 1421.
 National Aluminate Corporation, McKinley, J. M., and Carter, W. K., ceramic mixes, siliceous refractory articles or ware, preparation of raw mixes suitable for shaping and production of siliceous refractory articles or ware, (P.), B., 1095.
 See also Evans, W., and King, R. M.
 Nat. Aniline & Chemical Co., Inc., and Brown, R. V., [feeding of liquid during] vaporisation, (P.), B., 706.
 and Cotton, W. J., α -naphthal, (P.), B., 14, 318. Coloured metallic [aluminium] articles, (P.), B., 362. Sampling apparatus [for liquids], (P.), B., 579.
 and Croakman, E. G., coloured rubber products, (P.), B., 1155.
 and Ellzey, E. F., tetraiodophenolphthalicin compositions, (P.), B., 1119.
 and Flett, L. H., polyazo-derivatives of 8-hydroxy-1-naphthylamine [1:8-aminonaphthol], (P.), B., 398.
 and Holst, W. A., jun., production of coloured coal, (P.), B., 711.
 Jewett, J. E., and Kiplinger, C. G., rotary drum filter, (P.), B., 706.
 and Kranz, F. H., [purification] of hydroxybenzenephthalins, (P.), B., 444. Acridine compounds, (P.), B., 1165.
 and Kyrides, L. P., intermediates for rhodamine dyes, (P.), B., 940.
 and Ogilvie, J., quinoline-yellow bases, (P.), B., 397.
 and Payne, R. B., phenolic [and pyrazolone] compounds of colour bases, (P.), B., 141.
 and Rogers, D. G., sulphonation of anthraquinone and derivatives, (P.), B., 397.
 Rogers, D. G., and Ogilvie, J., α -aryl-aminoanthraquinones, (P.), B., 443.
 and Talbert, G. W., auramine colouring matters, (P.), B., 397.
 and Wood, R. O., rotary drum dryer, (P.), B., 1073.
 and Zwilmeyer, F., alkyl resinous composition, (P.), B., 112. Alkyl resin, (P.), B., 816.
 Nat. Benzole Co., Ltd., Hoffert, W. H., and Hancock, E. G., purification of hydrocarbons [benzol], (P.), B., 759.
 Nat. Canners Association. See Bohart, G. S.
 Nat. Carbon Co., Inc., [preventing creepage of electrolyte in] galvanic cells, (P.), B., 462.
 See also Broadwell, B. E., Chaney, N. K., and Heise, G. W.
 Nat. Fireproofing Corporation. See Matheny, C. S.
 Nat. Gypsum Co. See Grandell, D. De F.
 Nat. India Rubber Co. See Hazell, E., and Madge, N. G.
 Nat. Lead Co., treatment of lead and lead alloys, (P.), B., 1000.
 See also Behr, G. E., jun., Kern, E. F., Sheaff, E. H., and Thompson, G. W.
 Nat. Oil Products Co. See Porter, R. E., and Wolfson, I.
 Nat. Pigments & Chemical Co. See Fisher, E. E.
 Nat. Processes, Ltd., and Gyles, T. B., removal of lead and cadmium from zinciferous materials, (P.), B., 1098.
 Nat. Processes, Ltd., Robson, S., and Lewis, P. S., manufacture of sulphuric acid by the contact process, (P.), B., 494.
 Nat. Pure Water Corporation. See McLaughlin, W. L., and Skow, R. E.
 Nat. Radiator Corporation. See Novotney, T. A.
 Nat. Smelting Co. See Bonsack, W., and Frost, J. G. G.
 Nat. Standard Co., and Domon, E. C., coated steel article [wire or strip], (P.), B., 679.
 Nat. Tank Co. See Walker, J. P.
 Nat. Vaccine & Antitoxin Institute. See Parsons, J. F.
 Nat. Vermiculite Products Corporation. See Miner, C. S.
 Nat. Zinc Co., Inc. See Leverett, W. H.
 Natkina, A. I. See Dragunov, S. S.
 Natta, G., special type of unstable mixed crystals with anomalous lattice constants, A., 1200. Hydrogen, (P.), B., 227.
 Baccaredda, M., and Rigamonti, R., diffraction of electrons in the determination of the lattice structure of organic compounds, A., 687, 1061.
 Nattan-Larrier, L., and Grimard, L., "anti-embryonic" sensitiser in rabbit serum, A., 643. Preparation of an anti-embryonic antibody, A., 644.
 Grimard, L., and Nougues, S., "anti-embryonic" sensitiser and lack of vitamin-A, A., 1275.
 Naturin Ges.m.b.H., and Becker, Schultze & Co., fibrous material [from untanned hides and skins], (P.), B., 739. Artificial sausage skins or casings, (P.), B., 739.
 Naudé, S. M., absorption spectrum of diatomic antimony, A., 1438.
 Naugatuck Chemical Co., integrally united composite bodies, (P.), B., 114. Preparation of cement or coating material, (P.), B., 114.
 See also Gibbons, W. A., Hazell, E., MacGavack, J., Meuser, L., Ogilby, S. R., Owen, A. F., Roberts, E., Smith, O. H., Strickhouser, S. I., and Teague, M. C.
 Naugle, J. J. See Wadsworth, D. V.
 Naugolnikov, B. I. See Malinowski, A. E.
 Naumann, F. K. See Schafmeister, P.
 Naumann, H. N., vacuum evaporation and distillation, A., 724.
 Naumann, J. See Rieke, R.
 Naumov, S. N., and Manulkin, Z. M., metallo-organic compounds of tin, A., 967.
 Naumov, S. S., mechanisation of naphthalene removal from coal-tar oils, B., 1080.
 Naumova, L. J. See Rubin, B. A.
 Naves, Y. R., orange-flower water and "neroli water-oils," B., 124.
 Rus, G., and Allard, J., Raman spectra of isomeric citronellols and rhodinols, A., 865.
 See also Gliuchitch, L. S.
 Navias, L., lithium oxide as a constituent of glasses: its effect on thermal expansion, B., 767.
 Nayder, T., density of liquid iodine, A., 156.
 Naylor, C. A., Payman, W., and Wheeler, R. V., ignition of firedamp by coal-mining explosives. II. Sheathed explosives, B., 335.
 and Wheeler, R. V., ignition of gases. IX. Ignition by a heated surface; mixtures of methane and air at reduced pressures, A., 1464.
 Nazarianz, B., influence of phosphorus poisoning on synthesis of menthol-glycuronic acid, A., 1533.
 Nazarov, I. N., splitting of ditertiary alkyl-carbinols by dehydration; dehydration of *tert*-butyl*tert*-amyl- and *tert*-butyl*tert*-hexyl-carbinols, A., 62. Action of metallic sodium on aliphatic ketones. III. Reaction between sodium and isobutyron, A., 329.
 Nazarov, P. S., extraction of petitgrain oil from *Citrus brigarcidia*, Risso, B., 1164.
 Nazarov, S. A., preparation of amyl alcohols from the amylene fraction of vapour-phase-cracked gasoline, B., 1031.
 Nazarova, N. S. See Fursaev, A. D.
 Nazif, M. See Constable, F. H.
 Nead, J. H. See Epstein, S.
 Neal, A. M. See Du Pont de Nemours & Co., E. I.
 Neal, W. M., Becker, R. B., and Arnold, P. T. D., feeding value and nutritive properties of citrus by-products. I. Digestible nutrients of dried grape-fruit and orange cannery refuses and feeding value of grape-fruit refuse for growing heifers, B., 605. Digestible nutrients of Napier grass and *Crotalaria intermedia* silages, Natal-grass hay, and dried refuses of grapefruit and orange canneries, B., 1066.
 Neale, A. E. T. See Dunlop Rubber Co.
 Neale, S. M., concentration and ionising tendency of carboxylic acid groups in cellulose and other natural products, A., 736. Absorption of direct dyes of cellulose, B., 59.
 Near, C., and Sullivan, B., yeast variability as measured by the [Brabender] fermentograph, B., 1112. Use of the [Brabender] farinograph as an accurate measure of [water] absorption [of wheat flours], B., 1114.
 Nebel, W. See Du Pont de Nemours & Co., E. I.
 Neber, M., production of amino-acids from keto-acids and of urea in the liver, A., 1152.
 See also Edlbacher, S.
 Neber, P. W., cyclic 1:2-amino-ketones, (P.), B., 796.
 and Huh, G., preparing α -amino-ketones. I., A., 345.
 Neehaeva, N. N. See Kolodkina, L. A., and Zalogin, N. G.
 Nechamkina, M. A. See Popov, P. G.
 Necheles, H., and Coyne, A. [with Gross, H.], secretion of mucus and acid by the stomach in healthy persons and in persons with peptic ulcer, A., 648.
 and Meyer, Jacob, inhibition of gastric secretion by oil of peppermint, A., 884.
 See also Frank, R.
 Necke, A., and Müller, Herbert, electrolytic determination of small amounts of lead, A., 720.
 See also Schmidt, P.
 Neddermeyer, S. H., and Anderson, C. D., energy spectra of positrons ejected by artificially-stimulated radioactive substances, A., 1439.
 See also Anderson, C. D.
 Nedvidek, R. D. See Sinclair, W. B.
 Nedzvetski, S. V., combination of iodine with starch, A., 932. Enzymic synthesis of cholesteryl esters, A., 1416.
 Needham, D. M., and Heyningen, W. E. van, linking of chemical changes in muscle, A., 1012, 1278.
 See also Waddington, C. H.

- Needham, J., nitrogen catabolism in invertebrates. II. Correlation between uricotelic metabolism and habitat in the phylum *Mollusca*, A., 388.
See also Brachet, J.
- Needham, L. W., concentrating tables for washing coal, etc., (P.), B., 661.
and Hill, N. W., shape and specific surface of coal particles, B., 931.
- Neeff, A. See Reichel, L.
- Néel, L., magnetic properties of pure nickel near the Curie point, A., 435. Number of electrons contributing to the paramagnetism of nickel, A., 1063.
- Neeley, A. W. See Standard Oil Co. of Indiana.
- Neeley, J. P. See Fairchild, D. H.
- Neff, A., effect of fluorine in natural waters on the teeth of small fish, A., 1413.
- Neff, H. See Gossner, B.
- Neffen, R. W. See Kraut, H.
- Negishi, M. See Nakashima, T.
- Neher, R. See Crandell, D. De F.
- Nehring, K., variations of reaction in soils, B., 197, 1108.
and Möbius, H., influence of composition of the sorption complex of soils on fixation and utilisation of ammonium compounds, B., 687.
- Neighbors, C. C. See Western Electric Co.
- Neigus, I. See Wilhelmj, C. M.
- Neiley, S. B., and Dewey & Almy Chem. Co., rubber-impregnated fibrous sheet material, (P.), B., 1041.
- Neill, W. A., and Dorr Co., Inc., salt filter, (P.), B., 690.
- Neiman, M. B. See Gimmelman, G. A.
- Neisser, K., thiopyrrolecarboxylic acids, A., 221, 627.
- Neiswander, C. R., control of two [species of] greenhouse mealy-bugs (*Phenacoccus gossypii*, T. and Čikl., and *Pseudococcus citri*, Risso), B., 1013.
- Neitzke, O. F., principles of Bennett size-making process [for paper], B., 587. Dispersion of mineral matter [asphalt], (P.), B., 1083.
and Bennett, Inc., water-repellent papers or paper articles sized with wax dispersions, (P.), B., 1089.
- Nekhendzi, J. A., and Volkov, A. I., influence of composition of carbon-steel castings on their mechanical properties, B., 499.
- Neklevich, B. A. See Fratkin, R. L.
- Nekoosa-Edwards Paper Co. See Waern, A. W.
- Nekrasov, Z. I., refining of Grozni lubricating oil distillates, B., 1032.
and Shpelti, K. N., direct reduction of Krivorog fine ore, B., 498.
- Nekrassov, N., Stern, I., and Gulanskaja, Z., electrochemical potential and corrosion phenomena of iron, A., 306.
See also Stern, I.
- Nekrassova, O. V. See Ivanov, B. I.
- Nélis, P. See Ramon, G.
- Nellensteyn, F. J., fillers in road-making, B., 497.
- Neller, J. R., electrometric determination of chlorides in ash and sap of plants and in ground waters, A., 52.
- Nelson, A., and Macsween, J. C., hard seeds and broken seedlings in red clover (*Trifolium pratense*). IV. Early stages of germination (physical), A., 671.
- Nelson, C. S., Porter, G. H., and Carborundum Co., rubber-bonded abrasive article, (P.), B., 902.
- Nelson, C. S. See also Benner, R. C.
- Nelson, C. W., dyeing blacks on 100% woollen goods, B., 98. Union dyes for half-wool piece goods, B., 847.
- Nelson, D. H., economical manufacture, uniformity in composition, and quality of butter, B., 874.
- Nelson, E. E., diuretic effect of posterior pituitary extract in the anaesthetised animal, A., 128.
- Nelson, E. F. See Egloff, G., and Universal Oil Products Co.
- Nelson, E. K., Florida tangerine oil, B., 254.
- Nelson, F. C., changes and additions to the Pect-Grady method [of testing insecticides], B., 743.
- Nelson, G. H. See Levine, M., and Swann, S., jun.
- Nelson, H. A., study of paint durability based on some physical properties of the pigments used, B., 319. Metal priming paints; inhibiting qualities and influence of reactions within the paint film, B., 598. Zinc sulphide pigments for interior paints, B., 598. Painting zinc and zinc-alloy surfaces, B., 1151.
- Nelson, H. H., natural varnish gums, B., 860.
and Becken, G., paper, etc., (P.), B., 491.
- Nelson, J. M. See Saul, E. L.
- Nelson, J. W., and Palmer, L. S., phosphorus content and requirements of the flour beetle, *Tribolium confusum*, Duval, and its need for vitamin-D, A., 1263.
See also Palmer, L. S.
- Nelson, L. H., solidification of steel in ingot moulds, B., 151. Chemistry of an open-hearth heat. I., B., 1046.
- Nelson, M. G. See Keeble, F.
- Nelson, P. M., Lowe, B., Coover, W. F., and Buchanan, J. H., relationships of the physical and chemical characteristics and constants of lard to its culinary value, B., 1161.
- Nelson, R. A. See Kunsman, C. H.
- Nelson, R. C., and Harvey, R. B., presence in self-blanching celery of unsaturated compounds with physiological action similar to ethylene, A., 1289.
- Nelson, V. E. See Greenwood, D. A., Keil, H. L., and Ostrem, C. T.
- Nelson, Wilbur L., laboratory evaluation of oil stock. I. Classification of crude oils and methods of distillation, B., 1030. Typical analyses and evaluation curves, B., 1030.
and Fancher, G. H., hydrocarbons, (P.), B., 1034.
- Nelson, William L. See Butler, C. L.
- Nelson, W. O., anterior-pituitary-gonadal inter-relations, A., 1424.
and Overholser, M. D., effect of œstrin injections on experimental pancreatic diabetes in the monkey, A., 413. Evaluation of gonadotropic hormone preparations on the basis of the rat-mouse ratio assay, A., 1284.
See also Overholser, M. D.
- Némec, A., composition of mineral matter in wart-resistant and -susceptible varieties of potato, A., 1043. Effect of farmyard manure on starch content of potato tubers, B., 566. Effect of manuring with stall manure and with potassic fertilisers on yield and starch content of potato tubers in relation to chlorine content of soil, B., 867.
- Némec, A., and Lanik, J., determination of potassium in citric acid extracts of soils, in [plant ash from] Neubauer tests, and in liquid manure by the cobaltinitrite method, B., 514.
and Pohl, H., Dirks' method for determining phosphoric acid in soils, B., 37.
- Némec, B., gold in *Zea mays*, A., 1179.
- Némec, V. See Kubelka, V.
- Nemenov, L. See Kurtschatov, I. V., and Nasledov, D.
- Nemes, A. See Lissner, A.
- Nemilov, V. A., and Voronov, N. M., platinum-antimony alloys, A., 440. Platinum-rhodium alloys, A., 440.
- Nemkin, A. S. See Smirnov, D. N.
- Nemtschinova, V. R. See Borodulin, M. V.
- Nemtsov, M. S., destructive hydrogenation in presence of catalysts, B., 790. Effect of pressure in cracking, B., 836. Physical and chemical foundations of cracking in presence of hydrogen, B., 1030.
See also Altmann, L., Diner, I. S., Ipatiev, V. N., Krauze, M. V., and Maslianski, G. N.
- Neitzescu, C. D., and Chicos, I., reactions catalysed by aluminium chloride. XI. Branching of the carbon chain during treatment of saturated hydrocarbons with acetyl chloride in presence of aluminium chloride, A., 1221.
and Gavât, I. G., reactions catalysed by aluminium chloride. XII. Migration of halogen in carbon chains and rings, A., 1368.
- Ionescu, C. N., and Scărlătescu, N., determination of penetration of mustard gas in protecting materials [gas masks, etc.], B., 752.
- and Scărlătescu, N., addition of hydrogen sulphide and mercaptans to alkylene oxides, A., 729.
- Neogi, P., and Mukherjee, G. K., preparation of organo-mercury compounds of phenols and aromatic amines. II., A., 1139.
- Neogi, S., rapid micro-bromide test for detection of linseed oil in mustard-seed oil, B., 365.
- Neoral, K., and Blaha, J., storage of apples, B., 572.
- Nepenin, N. N., and Khvijuzov, P. V., recovery of heat and sulphur dioxide in sulphito pulping, B., 667.
- Neptunia Akt.-Ges., concentrate of chrome ores, (P.), B., 557.
- Nepveux, F. See Labbé, M.
- Neracher, O. See Reichstein, T.
- Nerad, A. J. See Brit. Thomson-Houston Co., and Gen. Electric Co.
- Nerad, H. See Eichmann, F.
- Nerdel, F. See Hüchel, W.
- Neri, A. See Passerini, M.
- Nesmejanov, A. N., and Freidlina, R. C., reaction of phenylarsine with organic compounds of tin and lead, A., 997.
and Powch, G. S., reaction of aliphatic diazo-compounds with mercury salts, A., 202.
and Sarevitsch, T. S., preparation of 2- and 4-allylresorcinol and their transformation into hydroxy-1-chloromercurimethyl-1:2-dihydrobenzofurans, A., 1233.
See also Freidlina, R. C., and Kotscheschkov, K. A.

- Nesterenko, L. L., and Lozowski, I. M., influence of partial hydrogenation on coking power of Moscow basin lignites, B., 707.
- Nestler, R. B. See Titus, H. W., and De Vane, G. M.
- Neterowicz, J. See Galecki, A., and Szychalski, R.
- Nethercot, W. See Whitehead, S.
- Netter, H., rôle of potassium in electrolytic system of muscle, A., 387.
- Nettlenbusch, L., and Jenkner, J., increasing the benzol yield in coking, B., 1081.
- Netuka, V., influence of electrolytes on rate of settling of activated carbon, B., 1079.
- Netzel, G., method for studying the performance of continuous filters, A., 1342.
- Neu, R., spoilage of fats and oils. III. Rancidity of oleic and elaidic acids: constitution of these acids, B., 363.
- Neubauer, H., soil examination by field trials and by the seedling method in relation to other methods of investigation, B., 1060.
- Neubauer, H. E., and Buffalo Foundry & Machine Co., rotary drum dryer, (P.), B., 49.
- Neubauer, M., potassium carbonate and fertilisers from sunflower stems, B., 801.
- Neubaur, E. See Strack, E.
- Neuberg, C., application of the double linking rule to questions of sugar chemistry, A., 609. Phosphorylation with living yeast, A., 1418.
- and Cahill, W., enzymic degradation of mucotinsulphuric acid, A., 402.
- and Hofmann, E., yeasts capable of fermenting trioses, A., 1164. Preparation of crystalline dihydroxyacetone by the biochemical method, A., 1282. Fermentation of trioses by yeasts, A., 1418.
- and Kobel, M., sugar fermentation, A., 253. Formation of diketones from ingredients of tobacco, A., 421. Specific effect of zinc on dismutation of methylglyoxal, A., 1353.
- and Ostendorf, C., dismutation of *p*-tolylglyoxal, A., 1282.
- and Schuchardt, W., crystalline and gelatinous salts of phosphoglyceric acids, A., 1349.
- and Vercellone, A., phytochemical reduction of *dl*-lactaldehyde, A., 1165.
- See also Kobel, M., Rotini, O. T., Schoenebeck, O. von, and Vercellone, A.
- Neuberger, A., electrometric titration of zein and iodozein, A., 170.
- Neubert, O., and Winthrop Chem. Co., agent for keeping cut flowers, etc., fresh, (P.), B., 692.
- Neuert, H., range of transmuted particles of some light elements obtained by bombardment with rapid protons, A., 1297.
- See also Kirchner, F.
- Neufeld, F., and Collier, W. A., chemo- and sero-therapy of pneumococcal pneumonia in the mouse, A., 1010.
- Neufeld, L. See Török, G.
- Neugebauer, T., ionic hardening, A., 801. Electron conductivity and lattice stability of binary crystals, A., 1187.
- See also Gombás, P.
- Neugebauer, F., influence of filtration on colorimetrically determined p_H of soil extracts, B., 324. Ameliorative action of irrigation on alkalisated soils, B., 372.
- Neuhaus, A., crystallographic and refractometric researches on the natural and synthetic corpus luteum hormone, A., 1195.
- See also Slotta, K. H.
- Neuhauss, H., and Ajax Metal Co., stainless steel, (P.), B., 273.
- Neujmin, H., and Popov, B., photochemical reaction of oxygen with hydrogen in the Schumann region, A., 46.
- Neuman, E. W., transition of potassium superoxide, A., 688.
- Neuman, M. B. See Gusev, N. V.
- Neumann, B., sulphuric acid catalysis. VI. Vanadic acid contact masses, B., 898.
- and Goebel, E., adsorption of oxygen by platinum, ferric oxide, and chromium oxide, A., 28. Adsorption of sulphurous acid by vanadium pentoxide, A., 28.
- and Kroblich, G., Harris process [of lead purification], B., 28.
- Kröger, C., and Jüttner, H., systems alkaline-earth chloride-alkaline-earth oxide and decomposition of alkaline-earth chlorides by steam, A., 1322.
- and Sonntag, A., decomposition pressures of nitrates and sulphates. III. Anhydrous copper nitrate, A., 1204.
- Neumann, F. See Hess, K.
- Neumann, F. W., middle piece of the Soxhlet extractor and the simple extraction tube, A., 1218.
- Neumann, G., examination of embedded material in ferro-concrete with X-rays, B., 24.
- Neumann, H., action of lime-copper sprays of varying concentration on *Phytophthora infestans*, in potato, B., 168.
- Neumann, Hans. See Auwers, O. von.
- Neumann, H. O., anterior pituitary and human sex glands, A., 667. Virilism, ovarian function disturbance, and anterior pituitary hormone excretion, A., 667.
- Neumann, K. See Honcamp, F.
- Neumann, Kurt (Berlin-Charlottenburg), allotropy of sulphur, A., 435. Vapour-pressure measurements with rhombic and monoclinic sulphur below the m.p., A., 438.
- Neumann, Kurt (Prag). See Schultes, H.
- Neumann, K. E., chemical utilisation of wood, B., 798.
- See also Schwalbe, C. G.
- Neumann, L., formation of liquid hydrocarbons from acetylene. V. Composition of liquid hydrocarbons formed on an iron-nickel catalyst from coke-oven gas treated in an electric discharge, B., 394.
- See also Peters, K.
- Neumann, M., and Aivazov, B., critical phenomena in oxidation and self-inflammation of hydrocarbons, A., 708.
- Neumann, R. E. See Scheinker, N. S.
- Neumann, W. See Wiessmann, H.
- Neumann, Walter, colorimetric determination of p_H at higher temperatures. III, A., 717. Injury of cotton fibres by salts, B., 586.
- Neumarx, W. See Keminski, E.
- Neunhaus, A., crystallographic and refractometric researches on α -folliculin, A., 413.
- Neunhoeffer, O., ring fission of *o*-nitrophenols by sulphuric acid. II, A., 1360.
- and Kölbel, H., ring fission of *o*-nitrophenols by sulphuric acid. I, A., 484.
- Neurath, H. See Pauli, W.
- Neuss, J. D., and Rieman, W., application of the glass electrode to a study of chromic acid, A., 38.
- Neusser, E., vanadates of cobaltamine complex salts, A., 1214.
- Neut, G. van der. See Waterman, H. I.
- Neuweiler, W., vitamin-C content of human milk, A., 540.
- Neuwirth, F., and Strupl, M., combating the leaf-louse (*Aphis fabae*, Scop.) on seed beet, B., 1110.
- Nevely, F., dyeing of knitted acetate rayon fabric, B., 448.
- Never, H. E. See Bamberger, P., and Kestner, O.
- Nevgi, G. V., and Jafkar, S. K. K., Raman effect in terpenes, A., 564. Raman effect in derivatives of cyclohexane, A., 564.
- See also Bhatnagar, S. S.
- Neville, G. H. J. See Norrish, R. G. W.
- Neville, H. A., and Harris, M., selective adsorption from soap solutions, A., 1070.
- See also Hazlehurst, T. H., jun.
- Nevin, T. E., absorption band spectrum of selenium, A., 1045.
- Nevitt, H. G., and White Eagle Oil Corp., analytical apparatus for testing asphalts, (P.), B., 538.
- New England Mica Co. See Boughton, W. A.
- New England Paint & Varnish Production Club, protective and decorative coatings on new concrete floors, B., 32.
- New Haven Dispensary. See Anderson, R. J.
- New Jersey Zinc Co., anodic coating of zinc-base metals, (P.), B., 157, 236.
- Broughton, W. W., and Werley, G. L., zinc alloy [for die-casting], (P.), B., 1099.
- and Cyr, H. M., paper-making, (P.), B., 58.
- Cyr, H. M., and Kress, O., paper-making, (P.), B., 58.
- Handwerk, E. C., and Mahler, G. T., condensation of zinc vapour, (P.), B., 315.
- and Holstein, L. S., high-strength lithopone, (P.), B., 960.
- Myhren, A. J., and Marquis, B., apparatus for mixing liquids and gases, (P.), B., 290.
- and Stutz, G. F. A., [coated zinc sulphide] pigments, (P.), B., 735.
- Truesdale, E. C., and Wilhelm, E. J., coating of zinc- or cadmium-base metals, (P.), B., 157.
- and Werley, G. L., zinc-base [die-casting] alloy, (P.), B., 556.
- See also Hooey, W. C., McCraven, B. N., Reinhard, C. E., Stutz, G. F. A., and Truesdale, E. C.
- New Process Fat Refining Corporation, distillation of fatty acids and products resulting therefrom, (P.), B., 238.
- New York Belting & Packing Co., and De Holzzer, L. J., [chloroprene] plastic compositions, (P.), B., 195.
- New York Paint & Varnish Production Club, pigment dispersion, B., 32.
- New Zealand, Department of Scientific and Industrial Research, iron content of pastures, A., 553.
- Newall, H. E., propagation of a zone of combustion in powdered coal, B., 291, 706.
- Newbery, E., motor-electrolytic current as a factor in corrosion, B., 231.

- Newbold, J. M., effect of different methods of disintegration of cottonseed on properties of the crude oil, with special reference to high-moisture seed, B., 911.
- Newcomer, M., and Newcomer, V. K., Portland cement, (P.), B., 308.
- Newcomer, V. K. See Newcomer, M.
- Newell, I. L., Ficklen, J. B., and Maxfield, L. S., critical study of catcotheline for determination of tin, A., 319.
- See also Pike, N. R.
- Newell, J. M. See Spain, W. C.
- Newell & Co., Ltd., E., Woodhouse, G. L., and Moss, A. H., grinding and crushing machinery, (P.), B., 929.
- Newhouse, R. C. See Allis-Chalmers Manuf. Co.
- Newhouse, W. H., vanadium, molybdenum, tungsten, and chromium in oxidised lead deposits, A., 60.
- Newing, R. A., interrelation of equilibrium nuclear distance with other molecular constants for diatomic molecules, A., 685. Uncertainty principle and zero-point energy of the harmonic oscillator, A., 1298.
- Newington, F. H. See Edmed, F. G.
- Newitt, D. M., and Szego, P., slow oxidations at high pressures. I. Methane and ethane. II. Methyl alcohol, ethyl alcohol, acetaldehyde, and acetic acid, A., 172.
- Newkirk, B. L. See Brit. Thomson-Houston Co., and Gen. Electric Co.
- Newkirk, W. B., and Internat. Patents Development Co., anhydrous glucose, (P.), B., 1064.
- Newman, A., crystallisation of borax from solutions, (P.), B., 355.
- and Pacific Coast Borax Co., potassium [penta-]borate, (P.), B., 899.
- Newman, A. B., and Green, Louis, temperature history and rate of heat loss of an electrically heated slab, B., 209.
- Newman, F. C. See Brayshaw Furnaces & Tools.
- Newman, F. H., and Walke, H. J., radioactivity of potassium, A., 275. Induced radioactivity and particle emission, A., 558. Radioactivity of potassium and rubidium, A., 677. Radioactivity of rubidium, A., 677. Cosmic ray ions and the shower producing radiation, A., 1187.
- Newman, F. S., pickle and chutney manufacture, B., 251.
- Newman, H. W., and Cutting, W. C., alcohol injected intravenously: rate of disappearance from the blood-stream in man, A., 1274. Alcohol injected intravenously: effect of habituation on rate of metabolism, A., 1409.
- Newman, M. S., acid degradation, A., 751.
- See also Anderson, R. J., and Fieser, L. F.
- Newman, S. See Genstein, E. S.
- Newport Industries, Inc. See Lee, H. R.
- Newsome, P. T. See Sheppard, S. E.
- Newson, H. W. See Gans, D. M., and Harkins, W. D.
- Newstrom, J. E., and Kobe, K. A., mercuration of *p*-cymene, A., 1390.
- Newton, A., [gasoline] absorption [from hydrocarbon gases], B., 392.
- Newton, E. B., and Goodrich Co., B. F., drying of rubber, (P.), B., 241.
- Newton, H. M., and Willard, A. C., occurrence of dark specks in baking-powder products, B., 285.
- Newton, H. W., Butler, R. S., and Nordberg Manuf. Co., forming, compacting, and discharging filter cake, (P.), B., 788.
- and Nordberg Manuf. Co., discharging filter cake, (P.), B., 788.
- Newton, J. D., and Paul, A. D., decomposition and movement of herbicides in soils, and effects on soil microbiological activity and subsequent crop growth. II, B., 1012.
- Newton, J. K. See Matthews, V. J.
- Newton, M., Johansson, H., and Johnson, T., carotenoid pigments of uredospores of wheat-stem rust and four of its colour variants, A., 798.
- Newton, R. See McCalla, A. G.
- Newton, R. C., changes in fat of home-canned meats, B., 250.
- See also Roschen, H. L.
- Newton, R. F. See Martin, F. D.
- Newton, R. G., electrical conductivity method for determining carbon dioxide and other reactive gases, A., 718.
- Newton, R. H., activity coefficients of gases, A., 575.
- and Dodge, B. F., activity coefficients of gases; application to calculation of effect of pressure on homogeneous chemical equilibria and to calculation of integral Joule-Thomson effects, A., 823.
- See also Varga, F. B.
- Newton, W., and Mayers, N., physiology of *Rhizoctonia solani*, Kuhn. III. Susceptibility of different plants as determined by seedling infection. IV. Effect of a toxic substance produced by *R. solani*, when grown in liquid culture, on the growth of wheat, carrots, and turnips, A., 898.
- Newton, W. H. See Marrian, G. F.
- Neyman, E., classification of lubricating oils, B., 981.
- Nga, (Miss) H. T., properties of electrodes of photosensitive organic substances, A., 1463.
- Niacet Chemicals Corporation. See Reed, H. C.
- Niagara Alkali Co. See McCombs, M. F.
- Nicoli, E., separation of potassium sulphate from schoenite solutions in processes for working up mother-liquors of salt lakes, B., 543.
- Nicholl, L., and Kay-Fries Chemicals, Inc., esters of polycarboxylic acids containing one or more alkoxymethylene groups, (P.), B., 1132. Solvent or plasticiser for compositions with cellulose derivatives, (P.), B., 1153.
- Nicholls, A. G. See Marshall, S. M.
- Nicholls, J. R., deterioration of shells when stored in oak cabinets, A., 234.
- Nicholls, P., and Reid, W. T., slags from slag-tap furnaces and their properties, B., 130.
- Nichols, E. H., roofing granules, (P.), B., 25. Granular [roofing] material, (P.), B., 548.
- Nichols, H. J., jun. See Standard Oil Development Co.
- Nichols, J. E. See Fraser, A. H. H.
- Nichols, M. L., determination of perchlorates, A., 316. Thickness of a surface film of copper, A., 442.
- and Cooper, S. R., germanium-germanium dioxide electrode, A., 1341. Potentiometric titrations with the germanium-germanium dioxide electrode, A., 1341.
- Nichols, M. S. See Kessler, L. H., Knechtges, O. J., and Ruf, H. W.
- Nichols, P. F., prune moisture content and processing, B., 1020.
- See also Morgan, A. F.
- Nichols Copper Co. See Lucas, J. H.
- Nichols Engineering & Research Corporation, treatment of sewage, garbage, or similar waste material, (P.), B., 928.
- Nicholson, D. G., and Reedy, J. H., explosive reaction of bismuth with perchloric acid, A., 834.
- Nicholson, F. See Bost, R. W.
- Nicholson, H. H., and Hanley, F., soil conditions in East Anglia, B., 777.
- Nicholson, W. M. See Harrop, G. A.
- Nickel, S. See Schönberg, A.
- Nickerson, J. T. R., and Proctor, B. E., biochemical changes in fish muscle stored at different temperatures under normal and sterile conditions, B., 747.
- Nieloux, M., micro- and submicro-determination of methyl alcohol; determination in blood and tissues, A., 1044.
- Le Breton, E., and Dontcheff, A., micro-determination of ethyl alcohol in blood and tissues, A., 116.
- See also Le Breton, E.
- Nicol, E. A. T., ecology of a salt-marsh, A., 1281.
- Nicol, H. See Thornton, H. G.
- Nicola, P. C. See Honig, P.
- Nicolet, B. H., special reactivity of peptides, A., 610. Derivatives of α -dibenzamidopropionic acid, A., 974. Addition of mercaptans to ethylenic linkings, A., 975. Formation of unsymmetrical acid amides, A., 976.
- Nicolet, M., presence of argon in stellar atmospheres, A., 555. Identification of neon in the spectrum of B stars, A., 800.
- Nicolet, P., white gold, B., 1049.
- Nicolini, W. See Röhrig, H.
- Nidecker, H. See Fischer, H. O. L.
- Nieder, J. B., recent advances in applied microchemistry, A., 1091.
- and Riley, C. H., addition of phenols to aryl[alk]enes; synthesis of phenylthymol and its isomerides, A., 79.
- See also Röhm & Haas Co.
- Niederländer, K. See Reindel, F.
- Niederreither, H., electrolyser and electric accumulator, (P.), B., 858.
- See also Lacher, L.
- Niedzwiedz, B. C., preservation of liquids [fruit juice, etc.], (P.), B., 44.
- Nieh, J. K. See Lilienfeld, J. E.
- Niekerk, J. van. See Fuchs, L.
- Niekerk, P. van. See Theron, J. J.
- Nieland, H. See Ernst, E.
- Nielsen, A., chloro-rubber as a technical raw material, B., 775. Chloro-rubber, B., 916.
- Nielsen, A. E., kneading machines for fats, (P.), B., 509.
- Nielsen, A. H., Li_2FeF_6 , A., 1332.
- and Barker, E. F., infra-red spectrum of methyl chloride, A., 145.
- and Nielsen, H. H., infra-red spectrum and molecular constants of hydrogen iodide, A., 806.
- Nielsen, C. F., mechanical drying of fibrous or granular materials, etc., (P.), B., 531.
- Nielsen, H. See Hahn, C. A.
- Nielsen, H. H., rotation of molecules in crystals, A., 568.
- See also Nielsen, A. H., Sprague, A. D., and Steward, W. B.
- Nielsen, H. P., and Dowdell, R. L., effect of thermal stresses on austenite, B., 151.
- Nielsen, J., application of low temperatures in leather softening, B., 1106.

- Nielsen, J. R. See Langseth, A.
- Nielsen, N., assimilation by yeast of high and low mol. wt. nitrogen compounds, A., 1538. Content of assimilable nitrogen in different Munich beer worts, B., 970.
- and Hartelius, V., metallic mixtures as co-catalysts of growth [of moulds], A., 535.
- Nielsen, N. A., causes of alimentary glycosuria in infective diseases, A., 108.
- Nielsen, N. C. See Kristensen, M. K.
- Nielsen, N. K., disc mills, (P.), B., 50.
- Nielsen, R. F. See Brönsted, J. N.
- Nielsen, W. M. See Mann, M. M.
- Niemann, C., Roberts, R. H., and Link, K. P., isolation and characterisation of a starch polysaccharide from the woody tissue of the apple tree (*Malus malus*), A., 1290. Isolation and determination of starch in plant tissue, A., 1550.
- Niemer, H. See Hahn, A.
- Niemierko, W., determination of chlorine in small amounts of tissue, A., 554.
- Nienburg, H., methylation of pyridine-carboxylic acids, A., 1250.
- Nienhuis, A. L. See Fabian, F. W.
- Nier, A. O., device to compensate for magnetic field fluctuation in a mass spectrophotograph, A., 1342.
- Nies, N. P., and Yost, D. M., thermodynamic constants of iodine trichloride, A., 447.
- Niessen, K. F., dependence of magnetic susceptibility of an electron gas on temperature, A., 4.
- Niethammer, A., [plant] stimulation problems, B., 741.
- Nieuwenburg, C. J. van, and Blumendal, (Miss) H. B., cerimetric titration of small amounts of iron by means of 2:2'-dipyridyl as indicator, A., 1095.
- and Dewald, R. H., geochemical frequency of strontium, A., 1102.
- and Hoeck, T. van der, dipicrylamine as a micro-reagent for potassium, rubidium, and caesium, A., 1472.
- and Zon, (Miss) P. M. van, semi-quantitative measurements of solubility of quartz in super-critical steam, A., 441.
- Nieuwenhuyzen, F. J., pharmacological assay of nicotine with rats and mice, A., 119. Biochemistry of silicosis, A., 519.
- Nieuwenkamp, W., two-dimensional crystals of cristobalite, A., 1061.
- See also Bever, A. K. van, Bijvoet, J. M., and Laves, F.
- Nieuwland, J. A. See Croxall, W. J., Danehy, J. P., Dorris, T. B., Hennion, G. F., Killian, D. B., Slanina, S. J., Sowa, F. J., Vaughn, T. H., and Young, C. A.
- Niewodniczański, H., forbidden lines in arc spectrum of lead, A., 138.
- See also Blaton, J., and Boorse, H. A.
- Nigam, B. S., Czapek's synthetic medium, A., 1281.
- Nightingale, G. T., effect of temperature on growth anatomy and metabolism of apple and peach roots, A., 1178.
- and Blake, M. A., effects of temperature on growth and metabolism of Elberta peach trees and growth responses of other varieties, A., 419. Effect of temperature on growth and composition of Stayman and Baldwin apple trees, A., 419.
- Nihlén, H. See Hägglund, E.
- Nikiforov, E. A., and Meitina, V. N., phosphate method of purification of drinking water, B., 48.
- Nikiforov, L., Voronenko, M., Beider, S., Gramenitzki, N. D., Faingar, M. M., Nikolskaja, V. P., Ignatovskaja, I. T., and Vlasova, E. A., chemical stability of automobile oils, B., 392.
- Nikiforova, V. M. See Gorbatshev, S. V.
- Nikitin, B. A., and Merkulova, M. S., radium in field waters and petroleum of Bibi-Eibat oil-field, A., 190.
- Nikitin, E. K. See Tschelincev, V. V.
- Nikitin, L. V., acoustic electrochemical phenomena, A., 306.
- Nikitin, N. I., and Komarov, F. P., composition of spruce damaged by red and blue rot and the resulting sulphite-cellulose, B., 446.
- Nikitin, V. N., physiology of milk secretion, A., 1147.
- Niklas, H., and Miller, M., how can lack of uniformity in soils be ascertained and mathematically adjusted in agricultural field trials? B., 37. Elimination of non-homogeneity of soils in field experiments by the "trend" method, B., 324.
- Niklewski, B., hot-fermentation of stall manure according to H. Krantz, B., 324. Biologically active humus, B., 514.
- Nikolaev, K. A. See Blagovestsohenski, A. V.
- Nikolaev, N. See Petrova, L. N.
- Nikolaev, N. S., and Koltuipin, S. G., melting of cryolite, B., 1043.
- Nikolaev, R., ensiled potatoes as raw material in manufacture of alcohol, B., 474.
- Nikolaev, V. I., equilibria of aqueous systems containing bromine and potassium in connexion with the industrial exploitation of Solikamsk sylvinites for bromine, A., 583. Origin of the Solikamsk sulphate-free potassium deposits, A., 601.
- and Kuznetsov, D. I., lakes of the Volga delta, A., 600.
- Kuznetsov, D. I., and Bokij, G. B., conditions of formation; and nature, of astrakhanite, A., 601.
- Nikolaeva, A. N. See Iljinski, M. A.
- Nikolic, R. See Pushin, N.
- Nikoliski, S. I. See Ginsberg, A. S.
- Nikoliuk, B. A., preparation of benzyl chloride in lead-lined iron apparatus, B., 12.
- Nikolskaja, J. P. See Pentegov, A. P.
- Nikolskaja, V. P. See Nikiforov, L.
- Nikolski, B. P., exchange of cations in soils, B., 71. Determining active acidity in soils. I. Theory, B., 421.
- and Evstropiev, K. S., Haber glass electrode, A., 320. Determining active acidity in soils. II. Glass electrode, B., 421.
- and Grigorov, O. N., antimony electrode for determining p_H [in soils], B., 421.
- Nikolski, K. V., theory of the photon, A., 679. Electromagnetic field of Dirac's electron, A., 679. Relativistic quantum mechanics, A., 912.
- Nikolski, N. A., and Chadshinov, V. N., purification of anthracene under industrial conditions, B., 1129.
- Nilsen, B., theory of free radicals and organo-alkali compounds, A., 283.
- Nilson, H. W., Palmer, L. S., and Kennedy, C., physiological effects of pituitary growth-hormone: growth and efficiency of food utilisation, A., 1424.
- Nilssen, R. See Hennessey, J. De L.
- Nininger, H. H., gold-bearing stony meteorite from Melrose, New Mexico, A., 60.
- Ninni, C., Sarnowicz, W., and Pezzangora, F., activation *in vitro* of the specific agglutination of *Brucella* antibody by non-specific sera, A., 664.
- See also Sandor, G.
- Nipper, H., influence of increasing amounts of clay and water on the strength of green and dry core sands, B., 358. Carbon-iron alloys, (P.), B., 998.
- See also Wecker, J.
- Nirenshstein, D. See Budnikov, P. P.
- Nishida, K. See Masuda, E.
- Nishida, Kitsuji, Fukamizu, T., and Hashima, H., wood substances from Manchuria. I. Wood constituents from the Sungari river district of Kirin, B., 547. Polysaccharides. VIII., B., 568. and Hashima, H., polysaccharides. IX. Hydrolysis of "xyloglucuronide" and the isolation of the new disaccharide "barium xyloglucuronate," A., 964.
- Nishida, Kotaro, sago palm. I. Changes in composition during ripening of the seed, A., 673.
- Nishida, Y., action of monoiodoacetic acid on carbohydrate metabolism in rabbits, A., 1020.
- Nishigōri, S., nitrogen case-hardening of steels, B., 853.
- Nishihara, S., digestion of human faecal matter with p_H adjustment by air control; experiments with and without garbage, B., 1120.
- Nishikawa, K., storage battery, (P.), B., 682.
- Nishikawa, S., Sakisawa, Y., and Sumoto, I., X-ray investigation of mode of vibration of piezo-electric quartz plates, A., 18.
- Nishikawa, T., preparation of ethyl cyanobutyrate from butyric acid and its conversion into veronal, A., 1357.
- Nishimitsu, H. See Ogata, A.
- Nishimoto, U., kephalin of egg-yolk, A., 228.
- Nishimura, H., influence of a small addition of elements on properties of aluminium alloys, B., 459. Microstructure of aluminium and its alloys, B., 997.
- Nishimura, T. See Hance, F. E.
- Nishina, K. See Suzuki, Shigeo.
- Nishina, Y., Tomonaga, S., and Kobayasi, M., creation of positive and negative electrons by heavy charged particles, A., 1439.
- Nishita, Y., effect of iodoacetic acid on rabbit muscle, A., 1158.
- Nishiyama, K., colloid-osmotic pressure of blood in normal and pathological conditions. X. Changes in osmotic pressure of blood and pleuritic exudates. XI. Effect of removal of fluid on protein concentration and colloid-osmotic pressure in cases of pleurisy. XII. Changes during muscular exercise, A., 617.
- Nishiyama, Z., X-ray investigation of transformation from face-centred to body-centred cubic lattice [in iron], A., 570. X-Ray investigation of austenite and martensite in special steels, A., 1060.
- Nishizawa, K., and Inoue, Takahide, Twitchell reagents. XV. Relation between the kind of fatty acids used and their darkening on heating with Twitchell reagent, B., 317.
- and Okuyama, M., Twitchell reagents. XIV. Relation between the kind of oils used and their resistance to the fat-splitting action of Twitchell reagents or to the darkening of the mixed fatty acids obtained, B., 276.

- Nisi, T. See Sibata, R.
- Nisigaki, N. See Osugi, S.
- Nisikado, Y., and Yamanti, K., sap stains of wood in Japan. II. *Ceratostomella pini*, Münch, the cause of a blue stain of pine trees. III. *Ceratostomella piceae*, Münch, the cause of a blue stain of pine trees, B., 357, 852.
- Nisioka, U. See Okamoto, M.
- Nisnivitsch, E. A., rapid liming of the flesh side [of hides], B., 468.
- and Azarch, F. A., preparing glue from flesh [of hides] without liming, B., 1008.
- Nissen, N. I., carbohydrate tolerance during carbohydrate starvation, A., 390.
- Nitardy, F. W., and Squibb & Sons, E. R., [analgesic] compositions containing an alkyl salicylate and an alkali stearate, (P.), B., 174. Stable hydro-alcoholic extract of ergot, (P.), B., 654.
- Nitrallay Corporation. See Hengstenberg, F. W. O.
- Nitromal Corporation. See Hornerberg, V. O.
- Nitschke, A., and Doering, H., thyroid in the pathogenesis of human rickets and tetany; blood-iodine, A., 1011.
- Nitschmann, H., lead glycerate and litharge-glycerol cement, B., 851.
- Nitta, I., and Watanabe, T., crystal structure of dicalcium barium propionate, A., 571.
- Nitti, F., medium suitable for obtaining homogeneous cultures of streptococci, A., 663.
- Nitzescu, I. I., and Georgescu, I., determination of copper in the aqueous humour, A., 232.
- and Secareanu, S., precipitation of insulin; rapid assay of commercial insulin preparations, A., 666.
- Nitzulescu, J., Ornstein, I., and Téodoru, M., blood-glutathione in cases of pellagra, A., 887.
- Niuberg, N., possibility of approximate spectro-photometry without analysis of the spectrum, A., 320.
- Niven, C. D., thermal conductivity of sundry materials, B., 1073.
- Niven, J. S. F., and Robison, R., development of calcifying mechanism in the long bones of the rabbit, A., 393.
- Niwa, K. See Shibata, Z.
- Nix, F. C., loss and restoration of photo-conductivity in red mercuric iodide, A., 282.
- Nixon, J. See Scouller, W. D.
- Niyogi, S. P., Narayana, N., and Desai, B. G., nutritive value of Indian vegetable foodstuffs. V. Nutritive value of ragi (*Eleusine coracana*), A., 1153.
- Njegovan, V., Nernst's heat theorem, A., 691.
- Nobécourt, P., and Ducas, P., blood-cholesterol in diabetic children, A., 382.
- Nobel, W. N., and Lindsey, G. S., physical factors affecting draining qualities of groundcoat enamels, B., 1093.
- Nobel & Wood Machine Co. See Tolman, C. P.
- Nobes, F. L. See Carborundum Co.
- Nobili, L., salts of camphorsulphonic acid used in hypodermic therapy, B., 653.
- Noble, R. E., relative productivity of certain culture media [for *B. coli* in water], B., 1071.
- and Tonney, F. O., solid brilliant-green lactose bile medium for direct plating with results in seventeen hours, A., 408.
- Noble, R. L. See Dodds, E. C.
- Nobori, H. See Nakae, D.
- Nochimowski, C., action on the rabbit's isolated intestine of an acetylcholine-sensitising substance formed in the trunk of the pneumogastric nerve by electric excitation, A., 1157.
- Nockolds, S. R., contaminated tonalites of Loch Awe, Argyll, A., 725. Petrology of Barnavave, Carlingford, Irish Free State. 1. The junction hybrids, A., 954.
- Noda, T., effects of addition of common salt during calcination of limestone. II. and III., B., 589.
- Nodzu, R., action of phosphate on hexoses. I. Formation of acetol from glucose in acid solutions of potassium phosphate, A., 734.
- Noebel, E., and Siemens-Schuckertwerke A.-G., filling an absorber-generator [for refrigeration], (P.), B., 578.
- Noël. See Gantois.
- Noël, R. See Canals, E.
- Nölting, J. P., jun. See Galpin, S. L.
- Noetzel, O., horse-radish juice, B., 524.
- Nogami, H. See Asahina, Y.
- Nogareda, C., surface reactions at very low pressures. I. Platinum-chlorine. II. Platinum-bromine, A., 711, 941.
- Nogin, K. I., Liverovski, A. A., and Sukhanovski, S. I., destructive distillation of aspen, B., 437.
- Noguchi, T. See Yamada, K.
- Nolan, J. J., and Nolan, P. J., counting atmospheric ions and determining their mobilities, A., 466.
- Nolan, P. J. See Nolan, J. J.
- Nolan, T. J., chemical constituents of Irish lichens; *Buellia canescens*. I, A., 133. See also Hardiman, J.
- Noland, T. J., heat of hydration of cements for Boulder Dam, B., 228.
- Noll, A., and Bolz, F., absolute and relative viscosity, B., 705.
- Noll, R. N., and Sciallo, M. A., separation of coal from coal culm, (P.), B., 439.
- Noll, W., synthesis of montmorillonite, A., 601.
- Nollau, E. H. See Du Pont de Nemours & Co., E. I.
- Nolle, J. K., pharmacology of convolvine, A., 1019.
- Noller, C. R. See Liang, P.
- Nolte, E., Meyer, H. J., and Fromke, E., purification of industrial waste liquids, (P.), B., 1072.
- Noltie, H. R., post-mortem glycogenolysis in rabbit liver, A., 1016.
- Nömmik, A., rate of decomposition and loss of nitrogen in stall manure, B., 741.
- Nomura, E. See Inokuty, H.
- Non-Metallic Minerals, Inc., refractory magnesia products, (P.), B., 455. See also McCaughey, W. J.
- Non-Poisonous Gas Holding Co., Ltd., and Cohn, Hugo, contact substances, (P.), B., 393. Contact substances [for the water-gas reaction], (P.), B., 537.
- Nonhebel, G. See Imperial Chem. Industries, and Pearson, J. L.
- Nonnenbruch, W. See Waldschmidt-Leitz, E.
- Nonomura, S. See Asahina, Y.
- Noponen, P., components of gastric juice, A., 1267.
- Norbori, H. See Nakae, D.
- Norbury, A. L., and Morgan, E., aluminium-manganese-silicon cast irons, B., 549. See also Brit. Cast Iron Res. Assoc.
- Nord, F. F., and Lange, F. E. M., cryolysis, diffusion, and particle size; experiments on sodium oleate, ovalbumin, and polyacrylic acids, A., 1276. State of aggregation of colloids and calculation of mol. wt., A., 1459. See also Lange, F. E. M.
- Nordberg, M. E., and Corning Glass Works, glass-to-metal thermal joint, (P.), B., 406.
- Nordberg Manufacturing Co. See Newton, H. W.
- Nordbø, R., determination of lactic acid by the method of Mendel and Goldscheider, A., 270.
- Norddeutsche Affinerie, working up cement copper, (P.), B., 956.
- Norddeuts. Asbest- & Gummiwerke G.m.b.H. See Weber, K.
- Norddeuts. Hefeindustrie Akt.-Ges., aeration of fermentation liquids in production of bakers' yeast, (P.), B., 330.
- Norddeuts. Seekabelwerke Akt.-Ges., [insulating] flexible bands, threads, and foils of polystyrol or similar artificial substances, (P.), B., 111.
- Nordenflycht, L., and Bustos, C. E., treatment of aluminium sulphate-containing minerals and salts, (P.), B., 147.
- Nordhagen, J. See Tronstad, L.
- Nordheim, L., production of [electron] pairs by collisions of particles, A., 677. and Gorter, C. J., thermo-electric power and resistance, A., 689. See also Heitler, W.
- Nordiske Fabrikker De-No-Fa A/S., and Holmboe, C. F., electrolytic apparatus, (P.), B., 773.
- Nordlund, M., determination of fructose in presence of glucose and sucrose, A., 68.
- Nordmann, J. See Kreimer, S.
- Nordmeyer, G. J. See Koppers Co. of Delaware.
- Nordsieck, A., analysis of the infra-red bands of formaldehyde, A., 1301.
- Nordström, O., recovery of chemical compounds from gases of soda-melting furnaces in production of sulphate-cellulose, (P.), B., 352.
- Nordt, E., and Trieschmann, H. G., structure of betaine, A., 1064.
- Norgate, R., automatic apparatus for detecting hydrogen sulphide, etc., in gases, (P.), B., 544.
- Noriga del Aguila, M., colorimetric determination of small amounts of cholesterol in blood and other biological fluids, A., 880.
- Norin, G., and McMurray, R. L., oils of *Artemisia rigida* (Nutt.), Gray, B., 654.
- Norkina, S. See Orékhov, A.
- Norling, F., band spectra of ionised hydrogen halides. I, A., 913. Electrolytic preparation of deuterium from heavy water, A., 1467.
- Norman, A. G., hemicelluloses. I. Alcoholic sodium hydroxide as a pre-treatment to extraction, A., 673. Mechanism of decay in wood, B., 1045. Composition of crude fibre [in feeding-stuffs], B., 1162. and Jenkins, S. H., determination of lignin. I. Errors introduced by certain carbohydrates. II. Errors introduced by proteins, B., 666. and Shrikhande, J. G., hemicelluloses. II. Association of hemicelluloses with lignin, A., 1435. See also Asbury, W. T.
- Normann, W., hardening of fats, B., 415.

- Normark, P., and Savron, E., influence of insulin on production of optically active substances in muscle-glucose-salt mixtures, A., 1543.
- Noro, H. See Yamasaki, R.
- Norquist, V. C., Treanor, E. E., and Butler Manuig. Co., filter, (P.), B., 787.
- Norris, E. R., and Rao, D. A. R. R., phosphatases of marine invertebrates, A., 660.
- Norris, F. W., and Carter, W. A., determination of diastatic power of malt by potassium ferricyanide titration, B., 519.
- and Resch, C. E., analysis of carbohydrates of the cell-wall of plants. I. Relation between uronic anhydride content and furalaldehyde, A., 1042.
- Norris, G. W. See Griffiths, E.
- Norris, J. F., Fasce, E. V., and Staud, C. J., reactivity of atoms and groups in organic compounds. XVI. Relative effect of substituents on the rates at which aryl and alkyl chlorides react with ethyl alcohol, A., 1206.
- and Haines, E. C., reactivity of atoms and groups in organic compounds. XVII. Effect of solvent on rate of reaction between benzoyl chloride and ethyl alcohol, A., 1207.
- and Strain, W. H., reactivity of atoms and groups in organic compounds. XV. Relative reactivities of the hydrogen of the hydroxyl group in benzoic acid and certain of its derivatives, A., 487.
- and Young, H. H., reactivity of atoms and groups in organic compounds. XVII. Effect of change in reactant and of temperature on relative reactivities of substitution products of benzoyl chloride, A., 1206.
- See also Jenkins, R. L.
- Norris, J. H., and Ampt, G. A., determination of formaldehyde, A., 846.
- Norris, L., and Worthing, A. G., rate of vaporisation of molybdenum in a vacuum, A., 156.
- Norris, L. C., Heuser, G. F., Ringrose, A. T., and Wilgus, H. S., jun., calcium requirement of laying hens, A., 393.
- See also Davis, H. J., and Wilgus, H. S., jun.
- Norris, R. J., development of chlorophyll and carotenoid pigments in etiolated plants, A., 263.
- See also Sperti, G.
- Norris, W. V., and Unger, H. J., infra-red band of arsine, A., 1300.
- Norrish, R. G. W., theory of combustion of hydrocarbons, A., 1081.
- and Neville, G. H. J., decomposition of ozone photosensitized by chlorine, A., 177.
- See also Bamford, C. H., Carruthers, J. E., Griffiths, J. G. A., and Saltmarsh, (Miss) O. D.
- Norsk Hydro-Elektrisk Kvaestof-Aktieselskab, ferrochromium free from carbon, (P.), B., 155. Production of salts by means of base-exchanging substances, (P.), B., 226.
- North, G. C., and Sommer, H. H., electrokinetics in relation to dairy phenomena. I. Theory and method, A., 647.
- See also Price, W. I.
- North, H. F. A., and Odland, T. E., seed yields of Rhode Island colonial bent (*Agrostis tenuis*, Sibth) as influenced by fertiliser applied, B., 325.
- North American Rayon Corporation. See Bley, R. S., Byron, T. H., Etzkorn, R., Rathgeber, F., Schmidt, Karl, and Stoeckly, J. J.
- North British Rayon, Ltd., Alletson, R. W., and Hartley, W., spinning of artificial silk threads, filaments, etc., (P.), B., 300.
- and Pitter, A. V., [matt] artificial silk threads, filaments, etc., (P.), B., 96.
- Walls, E., and Hartley, W., [apparatus for] treatment of centrifugally spun artificial silk cakes [with liquids], (P.), B., 301.
- North British Rubber Co., Ltd. See Johnston, A.
- Northcott, L., veining of ferrite, B., 189.
- Sulphur prints and sulphide inclusions [in steel], B., 677. Heterogeneity of steel ingots. XII. Constitution of steel and influence of differential solidification on segregation in steel ingots, B., 994.
- Northcutt, R. T., Johnston, A. L., jun., and Food Concentrates, Inc., drying of carbohydrate material rich in hygroscopic substances, (P.), B., 123.
- See also Johnston, A. L., jun.
- Northrop, J. H. See Holter, H., Kunitz, M., and Lavin, G. L.
- Northrup, D. E. See Eastman Kodak Co.
- Northrup, E. F., and Ajax Electrothermic Corp., heat treatment [of steel rolls], (P.), B., 273. Electric induction furnace, (P.), B., 363, 858, 910, 1052. Induction electric furnace [for melting glass or quartz], (P.), B., 507. Electric induction apparatus, (P.), B., 1100.
- Norton, A. J., Sontag, L. A., and Gen. Plastics, Inc., [aldehyde-cyclic ketone] artificial resin, (P.), B., 1154.
- See also Sontag, L. A.
- Norton, B., apparatus for washing coal, etc., (P.), B., 610.
- Norton, B. M., quantum yield in photodecomposition of liquid ethyl iodide at 3130, 2654, and 2537 Å., A., 48.
- Norton, C. L., and Babcock & Wilcox, Ltd., surfaced refractory articles, (P.), B., 407.
- Norton, J. F. See Ruehhoft, C. C.
- Norton, J. T., solubility of copper in iron and lattice changes during ageing, A., 816.
- and Ziegler, A., sensitivity of the γ -ray method of radiography, A., 320.
- Norton, R. J., and Bendix Brake Co., brake drum, (P.), B., 435. Friction facing, (P.), B., 580.
- Norton, R. M., apparatus for drying coal or other granular materials, (P.), B., 386.
- Norton Co. See Milligan, L. H., Ridgway, R. R., and Webster, D. E.
- Norvick, I., interchange of heavy atoms in organo-metallic compounds, A., 966.
- Norwood, S. M., steels with up to 7% chromium, B., 151.
- Nostitz, A. von, is von Kruedener's method for mechanical analysis of forest soils suitable for agricultural soils? B., 198.
- Kaolin, clay, loam, B., 565.
- Nosu, S. I. See Kasahara, M.
- Noteboom, L., experimental catatonias by means of derivatives of mescaline and adrenaline, A., 119.
- Notevarp, O., determination of vitamin-A with the Hilger vitameter equipped with a device for photographic recording, A., 792.
- Nothaas, R., and Widenbauer, F., physiological degradation of blood-pigment. IV. Relationship between the pigments of blood and urine, A., 103.
- Noto, J. See Tanaka, Yoshio.
- Notlage, M. E., boundary lubricating value of mineral oils of different origin, B., 212.
- See also Wildon, B. H.
- Notthohm, F. E., and Mayer, F., betaine in wheat bran, A., 1041. Chemical examination of alkaloid-free yellow lupins, B., 1068.
- Nottes, G. See Lock, G.
- Nottin, P., distribution of mineral matter in wheat starch, B., 474.
- and Daron, A., flour and bread from meslin, B., 780.
- and Dartois, E., determination of starch in flour by-products, B., 329.
- Nougues, S. See Nattan-Larrier, L.
- Novák, E. See Issekutz, B. von.
- Novak, J. J., and Raybestos-Manhattan, Inc., liquid saturating or coating material, (P.), B., 110. [Paper]-sizing material, (P.), B., 223. Waterproof asbestos sheet, (P.), B., 548. Asbestos board, (P.), B., 579. Friction elements, (P.), B., 579.
- Novák, J., symmetry alterations of etch figures due to optically active impurities, A., 1194.
- and Kesselring, R., ledebnritic preliminary iron alloy free from graphite, (P.), B., 273.
- Novák, V., mechanical analysis of soils with special reference to the coarser fractions, B., 243.
- Novák-Schreiber, W. See Hüttig, G. F.
- Novambère, E., building material, (P.) B., 271.
- Novik-Bam, E. Z. See Konemovich, P. E., and Pehelin, A. A.
- Novocol Chemical Manufacturing Co., Inc., anesthetics for hypodermic injection, (P.), B., 478*.
- Novogrudski, D. M., nitrous products in cultures of *Azotobacter chroococcum* and its relation to other soil micro-organisms, A., 1420.
- Novopan Studien-Gesellschaft zur Herstellung Besseren & Billigeren Brotes m.b.H., husking of grain, (P.), B., 827.
- Novoselova, A. V., equilibria in the system $\text{NaF-Na}_2\text{BeF}_4\text{-H}_2\text{O}$, A., 583.
- and Nagorskaja, N. D., equilibrium in the system $\text{Be(NO}_3)_2\text{-HNO}_3\text{-H}_2\text{O}$, A., 934.
- See also Nagorskaja, N. D.
- Novoselova, G. See Sadikov, V. S.
- Novotelnov, N. V. See Horovitz-Vlassova, L. M.
- Novotney, T. A., Hunter, L. N., and Nat. Radiator Corp., treatment of emulsions, (P.), B., 532.
- Novotný, D. F., adsorption of cuprous salts from Hlovay's reagent in precipitating cuprous acetylide, A., 293. Modification of Chavaleston's method for determination of high-percentage acetylene, B., 394.
- Novotny, E. E., Johnson, W. W., and Stokes, J. S., urea-aldehyde plasticised resin, (P.), B., 112.
- and Stokes, J. S., phenolic condensation product, (P.), B., 1153.
- Nowack Akt.-Ges., A., and Hessen, R., articles from [aniline- and phenol-formaldehyde] synthetic resins, (P.), B., 467.
- Articles from hardenable artificial resins, (P.), B., 599. Artificial resins, (P.), B., 915.

- Nowack Akt.-Ges., A., Hessen, R., and Schuch, K. A., artificial resins, (P.), B., 1005.
- Nowacki, W., new structure determinations of compounds of the type AB_3 , A., 17.
- Nowak, A. See Liese, and Suida, H.
- Nowak, K., rapid determination of potassium, A., 185.
- Nowakowski, A., compounds of high mol. wt. III. Octoyl esters of cellulose, and the interferometric method of determination of the degree of esterification of cellulose. IV. Mol. wts. of esters of cellulose with higher aliphatic acids, A., 736, 965.
- and Gawrych, S., physico-chemical properties and X-ray structure of certain ferric oxides and hydroxides, A., 285.
- Nowinski, W. W. See Waddington, C. H.
- Nowotna, A. See Kaufmann, L.
- Nowotny, F. See Musierowicz, A.
- Nowotny, H. See Halla, F.
- Noyes, A. A., Hoard, J. L., and Pitzer, K. S., argentic salts in acid solution. I. Oxidation and reduction reactions, A., 1088.
- and Kossiakoff, A., argentic salts in acid solution. III. Oxidation potential of argentous-argentic salts in nitric acid solution, A., 1079.
- Pitzer, K. S., and Dunn, C. L., argentic salts in acid solution. II. Oxidation state of argentic salts, A., 1079.
- Noyes, W. A., electronic theories of Lewis and Kossel, A., 1057.
- Noyes, W. A., jun., ionisation potential of acetone vapour, A., 1055.
- Duncan, A. B. F., and Manning, W. M., photochemical studies. XIX. Ultra-violet absorption spectrum of acetone vapour, A., 10.
- See also Howe, J. P., and Mahneke, H. E.
- Nübel, R. See Schultes, W.
- Nuki, B., Tamaki, Masakatsu, and Matsuo, Toshizo, deterioration of digitalis, B., 877.
- Null, F. E., mean kinetic energy and mean energy spent in excitation by electrons drifting through dense gases, A., 557.
- Numachi, F., formation of rust showing configuration of stream lines, B., 104.
- Núñez, J. O., spontaneous variations in blood-sugar in normal and diabetic subjects, A., 1001.
- Nunn, C. H. See Gen. Electric Co.
- Nuodex Products Co., Inc., solutions of water-insoluble naphthenates, linoleates, and abietates, (P.), B., 511.
- Nurmia, M., interconvertibility of glucose and fructose in plant tissue, A., 549.
- Carbohydrate metabolism of plants, B., 325.
- Nurnberger, C. E. See Livingston, R.
- Nurse, C. J., coating of articles with a cellulose [acetate] material, (P.), B., 816.
- Nussle, W., jun., Perkins, G. W., and Toennies, G., preparation of tetrahydro-naphthalene peroxide, A., 481.
- Nuti, C., surface tension of milk, B., 42.
- Nutt, D. B. See Standard Oil Co. of California.
- Nutt, J. D. See Ling, A. W.
- Nutter, P. See Sands, L.
- Nutting, G. C. See Spedding, F. H.
- Nutting, H. S., gas-conversion factors, B., 753.
- See also Dow Chem. Co.
- Nutting, L., increasing accuracy of electrolytic conductance measurements made with student-type equipment, A., 1097.
- Nuzzi, P., and Napoli, M., effect of sodium chloride on acid-base equilibrium, A., 524.
- Nyanza Color & Chemical Co., Inc. See Muller, O. F.
- Nygaard, J. O., meat extract from whales, seals, and other mammiferous sea-animals, (P.), B., 523, 605.
- and Bernitz Furnace Appliance Co., apparatus for generating water-gas, (P.), B., 485.
- Nyland, H. V. See Brown, G. G.
- Nyman, C. See Hägglund, E.
- Nyman, E., and Palmlov, A., effect of physical work on fate of alcohol in the organism, A., 117.
- Nyman, G. A. See Komppa, G.
- Nyrop, A., and Koefoed, Hauberg, Marstrand, & Helwig A/S. Titan, process and separator for preparing concentrated creams of saps, (P.), B., 1058.
- Nyrop, J. E., adsorption and catalysis, A., 940.
- Concentration of rubber latex, (P.), B., 685.
- O.
- Oakeshott, S. H. See Imperial Chem. Industries.
- Oakley, H. B., new type of osmometer for low pressures with some preliminary results for gum arabic, A., 297.
- Oakley, M., and Krantz, J. C., jun., arsenic test for reduced iron, A., 318.
- Assay of reduced iron, B., 359.
- Oakley, P. See Tullis, D. R.
- Oatfield, H. See Gilman, H.
- Obel, J. See Ege, R.
- Obenaus, W., change of analytical data in artificial ageing of mineral oils, B., 1032.
- Obenhaus, V. M. See Scott, A. F.
- Ober, B., Pagon, W. W., Pruett, G. L., Troxell, W. W., and Oberphos Co., apparatus for producing phosphatic fertilisers, (P.), B., 919.
- Oberdisse, K., and Roda, E., kidney as a site of thyroid action, A., 790.
- Oberlander, T. F., evaluation of the Procter-Searle method [of determining free mineral acid in leather], B., 1106.
- Oberle, A., residues from cracking of petroleum oils, B., 7.
- See also Mayer, Nikolaus.
- Oberlies, F. See Krüger, D.
- Obermann, B. See Wittig, G.
- Obermann, S. I., dyes for the toy maker, B., 847.
- Obermer, E., photo-electric densitometer, A., 188.
- and Milton, R., determination of urea in urine with a photo-electric densitometer, A., 1400.
- Oberphos Co. See Ober, B., Pfaff, G. C., and Waggaman, W. H.
- Oberst, F. W., determination of sodium in human red blood-cells, A., 372.
- Glutathione. III. Disappearance of glutathione added to various solutions and biological fluids, A., 1392.
- and Woods, E. B., glutathione. II. Relation between reduced and oxidised glutathione and the oxygen content and capacity of blood, A., 1392.
- Oberst, F. W. See also Raiford, L. C.
- Obinata, I., β -transformation in copper alloys, A., 1314.
- See also Isawa, T.
- Obnorski, A. See Jacyna, V.
- Obreimov, I. V. See Brilliantov, N. A.
- O'Brien, A. M. See Scottish Gas Utilities Corp.
- O'Brien, B., and Morgareidge, K., determination of vitamin-D, A., 417.
- O'Brien, J. A. See Standard Oil Development Co.
- O'Brien, J. R. See Kinnersley, H. W.
- O'Brien, R. A., and Parish, H. J., sterilisation of oils, B., 605.
- O'Brien, T. E. H., *p*-nitrophenol in crêpe [rubber] manufacture, B., 512.
- O'Brien, W. J., pigment [with protective colloid coatings], (P.), B., 110.
- Obrist, J., observation of the Brownian movement with the unaided eye, A., 699.
- Obrosof, N., treatment of Jerusalem artichoke for production of alcohol, B., 474.
- Obrutski, G., Leschtschinski, M., and Smirnova, A., rapid concentrated drum tanning of hides, B., 916.
- Obyradchikov, S. N., and Smidovich, E., latent heat of evaporation of crude-oil fractions obtained in a single evaporation, B., 131.
- O'Bryan, H. M. See Liben, I., and Skinner, H. W. B.
- Obst, W., mobilisation of plant nutrients in cultivated soils, B., 116.
- O'Callaghan, M. A., preservation of foods and beverages, (P.), B., 173.
- Occleshaw, V. J., phase-rule studies on metallic thiocyanates. III. The systems $Ba(NCS)_2-NH_4NCS-H_2O$ and $Ba(NCS)_2-AgNCS-H_2O$ at 25° , A., 168.
- Ochiai, E., Tsuda, K., and Ikuma, S., synthesis of C-substituted pyridyl-pyrrole derivatives. I. and II., A., 1253, 1381.
- See also Kondo, H.
- Ochiai, K. See Tamaru, S.
- Ochoa, S. See Cope, O., and Corkill, A. B.
- Ochsner, A., and Mahorner, H., comparative value of intravenous sclerosing substances, A., 655.
- Oclassen, C. See Eyerly, K.
- O'Connor, C. T., soluble phenolic resins, B., 69.
- O'Connor, J. J. See Mead Corp.
- O'Connor, J. M., physiological basis of sensation of cold. I. Influence of the initial skin temperature on excitability of the cold end-organs. III. Influence of body temperature on the resting oxygen consumption: a metabolic analogy to cold sensations, A., 520.
- Moriarty, M., and Fitzgerald, O., physiological basis of sensation of cold. II. Analogy between human cold sensations and shivering in the rabbit, A., 520.
- O'Connor, M. H., treatment in syphilis, A., 1403.
- Oda, K. See Matsui, Mototaro.
- Oda, R., production of benzenoid hydrocarbons from methane by thermal decomposition. I. and II., B., 261.
- See also Lauer, K.
- Odake, S. See under Otake, S.
- O'Daniel, E. V., and Amer. Cyanamid Co., fumigation of grain, (P.), B., 285.
- Oddie, T. H. See Pugsley, A. T.

- Ode, W. H. See Selvig, W. A.
- Odeen, H., and Slosson, H. D., theory and practice of bleaching fatty oils, B., 1054.
- Odell, W. W., treatment of combustible gas, (P.), B., 88. Coke and combustible gas, (P.), B., 537. Combustible gas, (P.), B., 792. Carbon black, (P.), B., 982. Production of chemical reactions, (P.), B., 1025.
- Odiotte, D. See Ménégau, G.
- Oding, J., analysis of tensile tests [on metals], B., 361.
- Odinov, A. See Leites, S.
- Odland, T. E., and Knoblauch, H. C., a 25-year field comparison of high-magnesium and high-calcium limes, B., 646.
- See also North, H. F. A.
- Odono, F., theory of permanent currents in metallic conductors, A., 566. Thermodynamic foundations of the theory of electrical equilibrium and of permanent currents in metallic conductors, A., 1298.
- O'Donnell, R. See Dillon, T. W. T.
- O'Duffy, D. See Enfield Cable Works.
- O'Dwyer, M. H., hemicelluloses of wood of English oak. II. Composition and properties of hemicellulose-A from samples of wood dried under various conditions, A., 421.
- Øeda, H., acetone [isopropylidene] compounds of α -hydroxy-acids and their Raman spectra, A., 960.
- See also Takayama, Y.
- Oehme, H. See Chem. Fabr. Kalk G.m.b.H.
- Oehnell, R. See Ahnsjö, S.
- Øholm, L. W., diffusion of copper sulphate, A., 162. Diffusion of magnesium and cadmium sulphates, A., 443.
- Ølander, A., electrochemical and X-ray investigation of solid thallium amalgams, A., 440. Electrochemical investigation of solid cadmium-antimony alloys, A., 936.
- Oelkers, H. A., and Vincke, E., excretion of cocaine, A., 1525. Commercial atropine-containing medicaments, B., 748.
- Øilgaard, E., micro-determination of sulphate in plasma, A., 104.
- Oelsen, W. See Körber, F.
- Øpik, E., atomic collision and radiation of meteors, A., 1297.
- Oeriu, S. See Balanescu, I.
- Ørskov, S. L., continuous photographic recording of volume changes of red corpuscles; influence of temperature and importance of p_H on permeability to glycerol and urea, A., 1260. Influence of carbonic acid and lead on permeability of blood corpuscles to potassium and rubidium, A., 1260.
- Örtenblad, B. See Myrbäck, K.
- Oesch, J. B. See Du Pont de Nemours & Co., E. I.
- Oeser, E., absorption and fluorescence measurements of cadmium and zinc halides in the vapour phase, A., 1187.
- Oesper, R. E. See Straka, L. E.
- Östby, O. See Jermstad, A.
- Oester, Y. T., [active principles of] *Gleditsia triacanthos* (Linné), A., 394.
- Oesterle, P., soluble dry filter for bacterial count in air, A., 1542.
- Oesterlin, M., and Krainick, H., chemotherapy of helminthics, A., 529.
- Oestermann, H., milk of abnormal f.p., B., 604.
- Oesterreicher, W., elimination of the gonadotropic hormone of the anterior pituitary and of folliculin in mania, depression, and schizophrenia at puberty, A., 1010.
- Oesterreichisch - Amerikanische - Magnesit Akt.-Ges., magnesite blocks of high resistance to changes of temperature, (P.), B., 150. Recovery of pure magnesium from crude magnesium or magnesianiferous materials, (P.), B., 157. Condensation of magnesium vapours, (P.), B., 858. Non-spalling highly refractory chromite bricks, (P.), B., 1095. Refining of magnesium and high-percentage magnesium alloys, (P.), B., 1099.
- Oesterreichische Dynamit Nobel Akt.-Ges., corrosion-resistant and mechanically workable [copper-zinc] alloys, (P.), B., 155.
- Oesting, R. See Allee, W. C.
- Oestreicher, F. See Freud, J.
- Oestreicher, T. See Ruska, H., and Wetzel, R.
- Oettel, W., stimulatory and inhibitory effects of silver and formaldehyde on bacterial growth: growth curves, A., 1031.
- Oettner, C. See Krauss, F.
- Offner, F., redetermination of parameter for hauerite, MnS_2 , A., 17.
- Offord, H. R., rapid test for chlorate ion; qualitative and approximately quantitative test especially suitable for work with plant extracts, A., 594.
- Offutt, H. H. See Billings, E.
- Offutt, J. S., and U.S. Gypsum Co., acoustical plaster for high-humidity conditions, (P.), B., 357.
- Ofitserov, V. V., exhaustive sulphonation of β -naphthylamine. I. and II., B., 91, 138.
- O'Flaherty, F., and Roddy, W. T., grease stains on [vegetable-tanned sole] leather. V. Microscopical study of hide-lipins in their relation to grease stains, B., 686.
- Ofner, A., synthesis of *p*-methoxybenzyl acetate, A., 1120.
- Ogata, A., and Hirano, Shiro, male hormone. VI. Male hormone from boar testes; new crystalline male hormone. VII. Test of male hormone by measurement of increase in weight of seminal vesicles of castrated rats, A., 1032.
- Hosoi, T., Nishimitsu, H., and Tomioka, S., reduction of aldehyde- or ketone-nitrite mixtures. III., A., 328.
- Ogata, T., cyanine dyes. VII. Synthesis of pentamethinecyanines, A., 223.
- Ogawa, M., nutritive value of canavanine, A., 1407.
- Ogden, G. See Taylor, H. S.
- Ogg, R. A., jun., mechanism of ionic reactions; heat of ionic substitution reactions, A., 1464.
- and Polanyi, M., substitution by free atoms and Walden inversion; decomposition and racemisation of optically active *sec*-butyl iodide in the gaseous state, A., 307. Mechanism of ionic reactions, A., 452. Diabatic reactions and primary chemiluminescence, A., 1464.
- Ogg, W. G., soils of Scotland. I. Introduction; Highlands and Hebrides, B., 777.
- and Robertson, I. M., manuring of newly cultivated soils. VIII. Scotland, B., 515.
- Ogg, W. G., and Stewart, A. B., field examination and sampling of soils, B., 243.
- Ogilby, S. R., and Naugatuck Chem. Co., forming of rubber articles [from latex], (P.), B., 643.
- Ogilvie, J. See Nat. Aniline & Chem. Co.
- Ogilvie, L., spotted wilt of tomatoes and its control, B., 822.
- and Mulligan, B. O., [report on] vegetable diseases. V., B., 246.
- See also Walton, C. L.
- Ogilvie, R. F., alkali reserve and fat content of the blood, A., 103.
- Oglesby, N. E., and Wright, H. V., catalyst, (P.), B., 673.
- Ogryzlo, S. P., hydrothermal experiments with gold, A., 1088.
- Ogston, A. G., constitution of the purine nucleosides. III. Potentiometric determination of dissociation constants of methylated xanthines, A., 1509.
- and Brown, J. F., potentiometric titration of non-aqueous solutions applied to amino-acids, A., 450.
- See also Moggridge, R. C. G.
- Ogston, F. J., and Green, D. E., mechanism of reaction of substrates with molecular oxygen. I. and II., A., 1277.
- Ogura, M., manufacture of lithographic varnish in an atmosphere of carbon dioxide, B., 598.
- Ogura, T., and Matsumoto, H., pyrite nodules in coal measures, with special reference to the Yen Tai and Pen Hsi Hu coalfields, South Manchuria, A., 1346.
- Oguri, S., photochemical reaction of cellulose. II. Action of light, and copper numbers of some cellulose samples. III. Determination of relative spectral distribution of energy in light from a quartz-mercury vapour lamp, A., 1298; B., 264.
- and Yoshida, T., hygroscopic moisture of cellulose. XIII. Indirect determination of heat of sorption of water vapour on cellulose, B., 1135.
- Oh, H. Y., calcium in beriberi and in fowls with similar symptoms due to calcium deficiency, A., 107.
- Ohara, K., submicroscopic structure of artificial silk, B., 142.
- O'Hare, J. J., and Amer. Rubber Products Corp., compounding of rubber, etc., (P.), B., 1105.
- O'Hara, C. C., new S. Dakota meteorite, A., 469.
- Ohashi, K., bile acids and carbohydrate metabolism. XXXII. Influence of bile acids on liver-glycogenesis and on $[H^+]$ of urine, A., 111.
- Ohdake, See under Odake.
- O'Hea, J. See Electrical Co., Ltd., D. & B.
- Ohio Brass Co. See Austin, A. O., and Meisse, L. A.
- Ohio Carbon Co. See Kropp, C. L.
- Ohkita, T., improved Williams rubber-abrasion testing machine, B., 1104.
- Ohl, F., effect of latex additions on viscose, B., 16. Corrosion-resistant alloys for cellulose and paper industries, B., 27. Cleansing of filter-cloths, other textiles, machine parts, vessels, etc., in oil and fat industry, B., 30. Linseed stand oils and temperature of treatment, B., 159. [Properties of] viscose rayon made from cotton linters, B., 221. Synthetic detergents, B., 264. Effect of cooking and drying on properties of fish oils, B., 464.

- Ohl, F., [vinyl] polymerides as lacquer bases, B., 642. Vegetable glue for painting and papering work, B., 864.
- Ohle, H., saccharosonic acids and their salts, (P.), B., 839.
- and Just, F., acetone [isopropylidene] compounds of sugars and their derivatives. XIX. Transition, *d*-fructose \rightarrow *d*-psicose (*ψ*-fructose) \rightarrow *d*-sorbitose, A., 735.
- Ohle, W., effect of organic colloids on behaviour of substances in natural waters, A., 1099.
- Ohlsen, A. S. See Linderström-Lang, K.
- Ohlson, M. A., and Daum, K., iron metabolism of normal women, A., 654.
- Ohlsson, B., and Blix, G., cyclic changes in lipin content of the liver of the rat, A., 113.
- Ohlsson, E., and Rosén, O., action of different amylases on starch, A., 1535.
- Ohno, H., preservation of fish, (P.), B., 1022.
- Ohta, A., iodine contents of endocrine organs of normal rabbits, A., 1396.
- Ohta, Z. See Asano, M.
- Oikawa, R., uricase. I.-III. Resynthesis of uric acid from its cleavage products by uricase. IV. Effect of inanition on uricolytic activity of liver extract, A., 405.
- Oinuma, S. See Nakashima, I.
- Oka, S., effect of surface on moving processes in dilute strong electrolytes, A., 449.
- Oka, Y. See Hakomori, S.
- Okabe, K., Harada, Masao, and Titani, T., content of deuterium in water of crystallisation, A., 48.
- and Titani, T., isotopic composition of water from petroleum sources, A., 1099. Concentration of heavy isotopes in cellulose, A., 1469.
- Okabe, S., membrane potential of muscle as a determining factor of excitability. I. Influence of chlorides on membrane potential and on excitability of the frog sartorius muscle. II. Action of hypertonic Ringer's fluid. III. Action of carbon dioxide on muscle. IV. Effect of fatigue due to prolonged stimulation of muscle. V. Effect of glucose-Ringer's fluid and highly-hypertonic Ringer's fluid on muscle. VI. Action of calcium chloride on muscle. VII. Action of sodium thiocyanate on muscle, A., 388.
- Okabe, T., and Kodama, S., gas metabolism of tissue *in vitro*. VII. Kidney tissue, A., 387.
- Okáč, A., experiments with Hahn's reagent, A., 1093.
- See also Dubský, J. V.
- Okada, H., influence of arsenic compounds on growth of cultures of fibroblasts *in vitro*; morphological changes produced. I. and II., A., 392, 1412. Arsenic habituation by means of cultivated tissue, A., 399.
- Okada, S., Watanabe, Koichi, and Nakamura, O., manganese dioxide for dry cells. I., B., 507.
- Okada, T., bilirubin excretion of the liver, A., 235.
- Okajima, S., relation between titre and ratio of peripheral length to [cross-sectional area of rayon, B., 446.
- Okamoto, M., and Nisioka, U., equilibrium diagram of system barium fluoride-magnesium fluoride, A., 1077.
- Okamura, H., micro-determination of fructose by Yamada's method; determination of true glucose, A., 674, 1392.
- Okamura, T. See Kondō, M.
- O'Kane, B. J. See Sharpe, B. A.
- Okatome, T. See Masaki, O.
- Okaue, S., influence of Röntgen treatment on uric acid metabolism, A., 1414.
- Okawa, H. See Kuriyagawa, T.
- Okazaki, A., Faraday effect of strong electrolytes in aqueous solutions. II., A., 1318.
- O'Kelly, A. A., selenium and tellurium as carriers in bromination of benzene, A., 203.
- Okhotin, V. V., and Smirnova, O. F., effect of salts on physico-chemical properties of alkali soils, B., 71.
- Okolskaja, T. See Orékhov, A.
- Okrański, M., crystal forms produced by solidification of fatty acids, A., 1523.
- Oku, M., colouring matter of the domestic cocoon. VII. Colouring matter of the green cocoon, *Bombyx mori*, var. *Seihaku*. VIII. Quercetin glucoside from mulberry leaves. IX. Water-soluble colouring matter of yellow cocoons; colouring matter of white, green, and red cocoons. X. Fluorescent colour of cocoons in ultra-violet light and colouring matters of cocoons, A., 883, 1398.
- Okulitch, G., and Golding, N. S., buffer value of cow milk. I. Methods. II. Preliminary examination, B., 42.
- Okuno, G. See Tanaka, Shinsuke.
- Okuno, H. See Uzumasa, Y.
- Okuno, T., equilibrium of sodium sulphate, sulphuric acid, and water, and the causticising of sodium sulphate, A., 703. Sodium sulphate. II. Recovery from rayon coagulation solution. III. Thermodynamical study of the production of sodium sulphate by the Leblanc process, B., 898. Reduction and causticising of sodium sulphate. III. Causticising with barium hydroxide, B., 1042.
- Okuyama, M. See Nishizawa, K.
- Olcott, H. S., vitamin-E. II. Stability of concentrates towards oxidising and reducing reagents. III. Evidence for the presence of a hydroxyl group; biological utilisation of esters; absorption spectrum, A., 129, 1287. Properties of vitamin-E concentrates, A., 1431. Antioxidants and autoxidation of fats. II., B., 68.
- See also French, R. B.
- Old, M. C., environmental selection of the fresh-water sponges (*Spongillidae*) of Michigan, A., 1154.
- Old Colony Trust Co. See McLaurin, W. W.
- Oldenberg. See Dibern. Oldenberg, O., molecular spectrum emitted from atomic iodine vapour, A., 2. Lifetime of free hydroxyl, A., 811.
- See also Frost, A. A.
- Oldershausen, E. von. See Blanck, E.
- Oldfeldt, G. O. See Blix, G.
- Oldham, H. See Schlutz, F. W.
- Oldham, J. W. H., and Robertson, G. J., transformations of isomeric sugars, A., 329. Transformation of glucose into galactose and gulose by simple optical inversion, A., 963.
- Oldham & Son, Ltd., and Holt, H., jun., [container for wet] galvanic battery, (P.), B., 683.
- and Mair, T. G., [partitioned boxes for] galvanic batteries, (P.), B., 158.
- Oldright, G. L., Brighton, T. B., and Dice, C. M., zinc metallurgy. II. Recovery of zinc from ferrite compounds in the electrolytic zinc process, B., 411.
- and Miller, V., smelting in the lead blast furnace. XI. Preparation by sintering. XII. Gases within the blast furnace at top and tuyères. XIII. Accretions within the blast furnace, and manner and rate of descent of stock column. XIV. Charging the blast furnace. XV. Slags from the Traill blast furnaces, B., 412, 500.
- See also Pryor, E. K.
- O'Leary, M. J. See Shaw, M. B., and Weber, C. G.
- O'Leary, W. J., Royer, G. L., and Papish, J., is the colour of the natural ruby due to iron? A., 61.
- See also Mayo, E. B.
- Olejník, H., and Hanzelka, F., detection of benzoic acid in wine, B., 1160.
- Olenov, J. M., precipitinogenic properties of "radium" strains of *Zygosaccharomyces mandshuricus*, Saito, A., 1027.
- Olin, H. L., Lykins, J. D., and Munro, W. F., electrical charges of activated carbons, A., 933.
- Olin, J. F., and Sharples Solvents Corp., alkali dimethylthiocarbamates, (P.), B., 1131.
- See also Thomas, C. Allen.
- Olipphant, M. L. E., secondary emission from elements bombarded with neutrons, A., 7.
- Kempton, A. E., and Rutherford, (Lord), energy released in nuclear transformations, A., 803. Nuclear transformations of beryllium and boron and masses of light elements, A., 910.
- Shire, E. S., and Crowther, B. M., separation of isotopes of lithium and some nuclear transformations observed with them, A., 7.
- Olitzki, L., action of aldehydes on antibodies, A., 644.
- Olive, T. R., flotation solves a problem in [cement] process raw materials, B., 546.
- Olivera, J. See Godfrey, G. H.
- Oliveiro, C. J. See Rosedale, J. L.
- Oliver, C. S. See Armstrong-Siddeley Motors.
- Oliver, E. See Haworth, W. N.
- Oliver, F., treatment of crude ammoniacal gas liquor, B., 47.
- Oliver, T. C. See Chem. Construction Corp.
- Oliver, W. F. See Burton, E. F.
- Olivera, G. See Domenici, G.
- Oliverio, A., 6-nitroveratraldehyde and hippuric acid, A., 747.
- Oliveros L. B., and Santos, A. C., alkaloid of *Eurycea ambotensis*, A., 551.
- Olivier, S. C. J., rule relating to formation of a double linking in aliphatic halogeno-compounds, A., 62. Esterase models, A., 659, 1163.
- and Weber, A. P., action of acids and bases on $\alpha\alpha$ - and $\alpha\beta$ -dibromoethanes, A., 62.
- Olivier, V., determination of potash in [sugar] juice and molasses, B., 328.
- Ollano, Z., secondary emission from elements bombarded with neutrons, A., 7. Secondary emission from elements of medium mol. wt. under action of radiation from Po + Be, A., 1442.
- Olmer, F. See Jolibois, P.
- Olmer, J., Paillas, J. E., and Sienasi, B., action of parathyroid extract on glycaemia in diabetes, A., 1269.

- Olmer, L. J., and Quinet, (Mlle.) M. L., compounds of magnesium chloride with organic compounds. I. Compounds with alcohols and acetic acid, A., 179.
- Olmsted, J. M. D., distribution of glucose in blood, A., 1392.
- and Read, L. S., glucose and non-glucose portions of "blood-sugar" in the hepatic and portal veins of the decapitate cat at different sugar levels, A., 389.
- See also Giragossintz, G.
- Olmsted, W. H., Curtis, G., and Timm, O. K., stool volatile fatty acids. IV. Influence of feeding bran-pentosan and fibre to man, A., 653.
- See also Williams, R. D.
- Olney, A. J., and Waltman, C. S., orchard fertiliser problems, B., 1157.
- Olsen, A. G., pectin. III. General theory of pectin jelly formation, A., 32.
- Shrinking of wood, (P.), B., 903.
- See also Sell, H. M.
- Olsen, A. L., and Washburn, E. R., solutions of isopropyl alcohol in benzene, in water, and in benzene and water, A., 438.
- Olsen, C., iron absorption and chlorosis in green plants, A., 1289.
- Olsen, F., and Cellulose Research Corp., cellulose, (P.), B., 896.
- See also Seavey, F. R.
- Olsen, H. C., calcium metabolism in hyperparathyroidism, A., 384.
- Olson, C. B., and Mergenthaler Linotype Co., treatment of metal parts to prevent adhesion of molten [type]-metal and composition employed therein, (P.), B., 461.
- Olson, E. See Lincoln, A. T.
- Olson, R. S. See Bohn, R. M.
- Olson, R. T. See Prouty, C. C.
- Olsson, E., absorption spectrum of NaH^2 , A., 279, 561. Emission spectrum of Te_2 , A., 907.
- Olsson, J. T., and Stockholm Superfosfat Fabriks Aktieb., treatment of wood for protection from blueing, (P.), B., 409.
- Olsson, K. E. See Seving, F. W.
- Olzewska, B. B., detection of ethyl alcohol in organs, A., 655.
- Olszycka, L., determination of bromine in biological material, A., 1182.
- See also Lévy, J.
- Oltman, R. E., trichloroethylene as a solvent in histological technique, A., 378.
- O'Malley, G. R., practice of flotation, B., 501.
- O'Mara, R. F., and Raymond Bros. Impact Pulverizer Co., concentrator, (P.), B., 1026.
- O'Meara, R. G. See Clemmer, J. B.
- Ominin, L. V., dunite as ceramic material [etc.], B., 453.
- Oneida Community, Ltd. See Gray, D., and Murray, W. S.
- O'Neil, M. A. See Vernon, C. C.
- O'Neill, H., twinning in α -iron, A., 922.
- and Farnham, G. S., tarnishing of liquid metals as studied by X-rays, B., 954.
- O'Neill, H. T. See Lockwood, L. B.
- O'Neill, L., and Partington, J. R., effect of one salt on solubility of another. VI. Solutions of cobaltamines in aqueous lanthanum thiocyanates, A., 26.
- Oneto, J. F. See Blieke, F. F.
- Ono, K., yeast amylase. I. Preparation of amylase solution from pressed yeast, A., 1415.
- Ono, M. See Takei, S.
- Onoda, T. See Ishihara, T.
- Onokhova, N. P. See Bukin, V. N., Ivanov, N. N., Murri, J. K., and Shivrina, A. N.
- Onoprienko, I. S. See Borshkovski, S. E.
- Onorato, E., structure of phosgenite, A., 571. Determination of direct and inverse forms in pyrites, A., 1101.
- Ontario Research Foundation. See Hall, Robert O.
- Oosterhout, J. C. D. See Texas Co.
- Oosthuizen, P. M. See Woodman, H. E.
- Oparin, A., activity of enzymes in living cells, A., 400.
- Oparin, A. I., and Kamogorova, K. A., sugar losses in storage of dry beets, B., 119.
- Oparina, M. P., pyridyl-2-acetic acid and pyridyl-2,6-diacetic acid, A., 988.
- Karasina, A. B., and Smirnov, B., preparation of apomorphine, B., 828.
- and Smirnov, B., condensation products of pyridine bases with benzaldehyde, A., 989.
- Opisso, F. See Francesconi, L.
- Opitz, K., and Rathsack, K., nutrient control of soils on the basis of static manurial trials with the help of the Mitscherlich and Neubauer methods, B., 1060.
- Opolnick, N., chemical elements and their atomic numbers as points on a spiral, A., 1048. Reduction of nitrobenzene with dextrose in alkaline solution, B., 984.
- Oppel, V. V. See Banaitis, S. I.
- Oppenauer, R., synthesis of dehydro-androsterone by decomposition of γ -sitosterol from soya beans, A., 981.
- See also Reichstein, T.
- Oppenheimer, J. R., disintegration of lithium by protons, A., 7. Are the formulae for absorption of high-energy radiations valid? A., 278. Charge and field fluctuations, A., 278. Production of pairs by charged particles, A., 278. Disintegration of the deuteron by impact, A., 910.
- and Phillips, Melba, transmutation function for deuterons, A., 1296.
- and Plesset, M. S., positive electron, A., 139.
- Oprean, R. See Popoviciu, G.
- Oprisiu, C. See Popoviciu, G.
- Opticolor A.-G., copying images on colour-record lenticular films, (P.), B., 703.
- Opuikhtina, M. A. See Osokoreva, N. A.
- Orahovats, D. P., and Gotser, T., blood-vessels, blood-pressure, and adrenaline, A., 1031.
- Orbán, G., concentration of heavy water within the human organism, A., 1396.
- Orcel, J., and Fastré, P., dispersion curves of reflecting power standards of use in microscopic study of metallic minerals, A., 839.
- Orchard, O. B., combined fungicide and insecticide for use in controlling leaf mould and red spider mite, B., 374.
- Control of wireworms, B., 374.
- Eelworm disease of cyclamen, B., 778.
- and Read, W. H., leaf mould of tomatoes; control by vaporisation of sulphur; fumigation with [benzo]-quinone, B., 374.
- See also Bewley, W. F., and Read, W. H.
- Orcutt, F. S., and Fred, E. B., light intensity as an inhibiting factor in fixation of atmospheric nitrogen by Manchu soya beans, A., 1414.
- Orcutt, F. S., and Waters, R. M., possible influence of rare gases on physiology, A., 895.
- and Wilson, P. W., effect of nitrate-nitrogen on carbohydrate metabolism of inoculated soya beans, A., 795.
- Orcutt, M. See Jones, F. S.
- Ordal, E. J. See Halvorson, H. O.
- Orechkin, D. B. See Rapoport, I. B.
- Orechovitsch, V. N., Bromley, N. V., and Kuzmina, N. A., proteolysis in regenerating tissues. III. Changes in activity of tissue-protease during regeneration of amphibian organs, A., 779.
- Orékhov, A. [with Tiedebel, W.], *Senecio* alkaloids. I. Alkaloids of *S. platyphyllus*, D.C., A., 764.
- and Gurevitch, H. [with Okolskaja, T.], *Sophora* alkaloids. IX. Thermopsine, A., 872.
- and Konovalova, R. [with Eremina, E.], alkaloids of *Convolvulus pseudocantabricus*. III. Constitution of convolvine and isolation of two new bases, A., 872.
- and Konovalova, R. [with Tiedebel, W.], *Senecio* alkaloids. II. Platyphylline, A., 1387.
- and Norkina, S., alkaloids of *Cytisus caucasicus*, A., 1549.
- and Norkina, S. [with Maximova, T.], alkaloids of *Anabasis aphylla*. X. Reduction of aphyllidine. XI. Hofmann degradation of aphyllidine, A., 97, 227. Alkaloids of *Arundo donar*, L., A., 634.
- and Proskurnina, N., *Sophora* alkaloids. VII. Alkaloids of *S. flavescens* and the identity of sophocarpidine with matrine, A., 635.
- and Proskurnina, N. [with Lazurevski, G.], alkaloids of *Ammodendron Conollyi*, Bge. I., A., 1387.
- Proskurnina, N., and Konovalova, R., *Sophora* alkaloids. VIII. Alkaloids from seeds and foliage of *S. alopecuroides*, A., 635.
- Rabinovitsch, M., and Konovalova, R., *Sophora* alkaloids. VI. Bases of high b.p. from the foliage of *Sophora pachycarpa*; sophoridine and sophocarpine, A., 97.
- See also Konovalova, R.
- Orel, R., natural gas as boiler fuel, B., 132.
- Orella, P. R., toxicology of hydrocyanic acid, A., 896.
- Orelup, J. W., stabilisation of petroleum products, (P.), B., 136. Treatment of [lubricating] oils to improve their colour, (P.), B., 346. Sulphated condensation products of fatty acids and monoethanolamine, (P.), B., 939. Colouring of leaded gasoline, (P.), B., 1128.
- Orent, E. R. See Itter, S.
- Oreshkin, G. G., sintering of Nikopolsk manganese ore and an attempt to smelt ferromanganese from the agglomerate, B., 27.
- Orestano, G., effect of ephedrine on the respiratory exchange, A., 654.
- Oriol, A., Anguera, I., and Vidal de Cárcer, M., intimate problem of radical assimilation, A., 548.
- Orionov, A. A. See Lainer, V. I.
- Orla-Jensen, S., vitamin and nitrogenous food requirements of the true lactic acid bacteria, A., 899.
- Orlov, A., petrochemistry of the Middle Bohemian pluton, A., 1477.

- Orlov, I. E., determination of bromine in brine, B., 671.
- Orlov, N. A., new synthesis of hydrocarbons of C_nH_{2n+2} series, A., 352.
- and Broun, A. S., catalytic decomposition of thiophen in presence of hydrogen, B., 12. Determination of sulphur [in fuel oils] by the lamp method, B., 54.
- and Ivanov, I. Z., humic substances. VIII. Humification during weathering of oleic acid and mineral oils, B., 1032.
- and Radtschenko, O. A., humic substances. VI. Action of atmospheric oxygen on coopersite, B., 484.
- Schostakovski, M. F., and Schabarov, F. V., preparation of cyclohexanol, A., 208.
- Tischtschenko, V. V., and Tarasenkova, E. M., humic substances. VII. Berginisation and oxidation of peat humic acids, B., 791.
- Uspenski, V. A., and Shachovtzev, I. N., shungite, A., 1479.
- Orlov, N. M., testing wearing qualities of babbit metal, B., 65.
- See also Borzdika, A. M.
- Orlov, N. N., and Solodar, L. S., dealkylation of aromatic hydrocarbons: reversibility of the Friedel-Crafts reaction, A., 967.
- Solodar, L. S., and Rozenman, M. A., solutions of vat dyes, B., 298.
- Orlova, L. M. See Adadurov, I. E.
- Orlova, Y., and Mlodzeevskaja, N., cacao-butter substitute, B., 1149.
- Orlovsky, N. V., chemical amelioration of solonetz, B., 71.
- Orloff, S. H., dyeing of rayon plush and velvet, B., 988.
- Ormond, H. van. See Gorter, E.
- Ormont, B., maximum valency of elements and atomic structure. I. and II., A., 1058.
- and Samoilov, A., volumetric determination of boron nitride, A., 1093.
- Ormsbee, G. D. J., Toledo beater control [for paper mills], B., 719.
- Ornstein, G., chlorine treatment of brewery water, B., 656. Aqueous solutions of chlorine, (P.), B., 900.
- Ornstein, I. See Nitzulescu, J., and Parhon, C. I.
- Ornstein, L. S., swarm theory of liquid crystals, A., 20. Optical research on evaporated metal layers, A., 1310.
- and Cittert, P. H. van, fine structure of Rayleigh radiation. I. and II., A., 565, 807.
- Janssen, C., Krygsman, C., and Horst, D. T. J. ter, oxidation of transformer oil, B., 484.
- and Key, J., transition probabilities in sharp and diffuse series of the alkalis, A., I.
- Lindeman, H., and Vreeswijk, J. A., jun., intensity measurements in the fine structure of the Balmer line H α , A., 907.
- and Meyer, J. W., velocity of alcoholic fermentation, A., 534.
- and Went, J. J., intensity of Raman lines as a function of the frequency of the incident rays, A., 680. Influence of temperature on Raman lines of crystals, A., 806.
- and Wijk, W. R. van, derivation of distribution functions in problems of Brownian motion, A., 31.
- Ornstein, L. S. See also Horst, D. T. J. ter, Kruthof, A. A., and Milatz, J. M. W.
- Ornstein, O., and A.-G. Chemischer Werte, disinfecting and sterilising liquids, etc., (P.), B., 704.
- Orowan, E., strength and real structure of crystals, A., 151.
- Orr, A. P. See Marshall, S. M.
- Orr, J. H., and Reed, G. B., influence of cysteine on production of hemotoxin of *Cl. welchii*, A., 408.
- Orr, M. D. See Moloney, P. J.
- Orr, T. G. See Glasen, A. C.
- Orr, W. B. See Downing, E.
- Orr, W. J. C., refractive index of deuterium, A., 810.
- and Butler, J. A. V., rate of diffusion of deuterium hydroxide in water, A., 1313.
- and Thomson, D. W., diffusion of heavy into light water, A., 25.
- Orri, M., [fat] metabolism hormone of the pituitary, A., 541.
- Ort, J. M., and Roepke, M. H., platinum electrode potentials in mildly alkaline sugar solutions, electromotively active reductant present, and catalytic effect of iron on its oxidation, A., 170. Junction potentials between solutions of sugars and potassium chloride, A., 1462.
- Ortner, G., and Stetter, G., atomic disintegrations with radium-B + C as source of rays. I. Method, A., 277.
- Orzechowski, G., mechanism of cell-stimulation by substances foreign to the body, A., 780.
- Gömöri, P., and Hundrieser, M., fate of oxalic acid in dogs, A., 1160.
- Osawa, A., X-ray analysis of iron-aluminum alloys. II., A., 158.
- Osborn, H., lithium, B., 233.
- Osborn, I. S., and Bartlett & Snow Co., C. O., incinerating plant, (P.), B., 656.
- Osborn, R. T. See Standard Oil Co. of California.
- Osborne, F. F., anemousite in essexite, A., 1220.
- Osborne, G. See Spence, H.
- Osborne, J. H. See Merryweather & Sons.
- Osborne, R. L. See Mulinos, M. G.
- Osburn, J. M. See Burekhalter, R. N.
- Osburn, O. L., Stritar, J., and Werkman, C. H., thermophilic fermentation of beet pulp, B., 650.
- and Werkman, C. H., comparative dissimilation of xylose and glucose by *Escherichia coli* and *Citrobacter indolicum*, A., 255. Utilisation of agricultural wastes. II. Influence of nitrogenous substrate on production of butyl and isopropyl alcohols by *Clostridium butylicum*, B., 604.
- Oschman, V. A., and Zertschaninova, T. K., determination of small quantities of zirconium in rocks by the phosphate method, A., 1339.
- Oschmian, G., determination of pentosans by reduction with furfuraldehyde, A., 1354.
- Oseen, C. W., theory of anisotropic liquids. XXI. Molecular forces produced by liquid crystals, A., 433. Theory of viscous liquids, A., 575. [Wave-mechanical theory of the Stark effect and atomic interactions], A., 676.
- Osetrova, E. D. See Tschelincev, G. V.
- Osgood, G. H. See Peterson, R. G.
- O'Shaughnessy, F. R., and Hewitt, C. H., rôle of nitrogen in biological oxidation, B., 880.
- O'Shea, M. See Lyons, J.
- Oshiba, F., fatigue and recovery therefrom of carbon steels under repeated impacts, B., 359.
- Oshima, G., biochemistry of carbohydrates. XII. β -Glycuronidase, A., 402.
- Oshima, S., inorganic toxic compositions as antifouling agents in ships' bottom paint. I. Determination of antifouling effects. II. Antifouling paints containing inorganic compounds other than mercury and copper, B., 277. Organic toxic compounds as antifouling agents in ships' bottom paint. I., B., 319. Antifouling paints containing no mercury. IV.—VIII., B., 509, 734.
- Oshima, Y., and Fukuda, Y., effect of ash on combustion characteristics of carbons, B., 580.
- Osipenko, P., and Lipkina, E., synthetic tanning substances derived from peat tar, B., 819.
- Osipov, A. P. See Kiselev, N. N.
- Osier, T. G. See Lynch, G. R.
- Osmulski, V. F. See Resh, M. P.
- Osnabrucker Kupfer & Drahtwerk Akt.-Ges., alloy of copper and zinc [for condenser tubes], (P.), B., 638.
- Osokoreva, N. A., Opuikhtina, M. A., Shoyket, D. N., Plaksina, E. F., and Saslavski, A. J., equilibria in the system NaCl-KCl-MgCl $_2$ -H $_2$ O, A., 448.
- Osol, A., and Kilpatrick, M., titration of *p*-hydroxybenzoic acid, A., 928.
- Osswald, E., recrystallisation of silver of different degrees of purity, A., 1060.
- Osswald, H. See Brintzinger, H.
- Ostendorf, C. See Neuberg, C.
- Ostendorf, P., and Eisner, P., plating metal sheets or plates or iron or other metal, (P.), B., 998.
- Oster, R. H., irradiation of *Saccharomyces* with monochromatic ultra-violet light. II. Influence of modifying factors. III. Absorption of ultra-violet energy by yeast, A., 253.
- and Arnold, W. A., irradiation of *Saccharomyces* with monochromatic ultra-violet light. IV. Relation of energy to observed inhibitory effects, A., 534.
- Osterberg, A. E., and Helmholtz, H. F., bactericidal action of ketonurine, A., 1421.
- and Keith, N. M., clinical significance of a very low concentration of urea in blood, A., 1010.
- See also Comfort, M. W.
- Osterberg, H., and Cookson, J. W., some piezoelectric and elastic properties of β -quartz, A., 1310.
- See also Roebuck, J. R.
- Osterhout, W. J. V., osmotic pressure in relation to permeability in large plant cells and in models, A., 265. Electrical behaviour of large plant cells, A., 265. How do electrolytes enter the cell? A., 671. Chemical restoration in *Nitella*. I. Ammonia and some of its compounds, A., 1289.
- and Hill, S. E., restoration of potassium effect by action currents, A., 1038.
- and Kamerling, S. E., accumulation of electrolytes. VIII. Accumulation of potassium chloride in models, A., 1523.
- See also Hill, S. E., Jacques, A. G., and Kamerling, S. E.
- Ostermann, G. See Esser, H.

- Ostermann, R. M., Sheridan, S. A., and Superheater Co., feeding of water to boilers, (P.), B., 50.
- Ostermann, W., and Amer. Bemberg Corp., artificial silk, (P.), B., 897.
- Ostern, P., mechanism of poisoning [of muscle] with iodoacetic acid, A., 239.
- Baranowski, T., and Reis, J., formation of adenosinetriphosphoric acid and rôle of phosphagens, A., 778. Chemical reactions in muscle. VIII. Phosphoglyceric and adenylic acids, A., 1150.
- and Chem. & Pharm. Fabr. G. Henning, adenosinephosphoric acid, (P.), B., 878. See also Mann, T., and Farnas, J. K.
- Osterstrom, R. C., and Pure Oil Co., aromatic lubricating oil, (P.), B., 261. Lubricating oil, (P.), B., 760.
- Wagner, C. R., and Pure Oil Co., treatment of slop-wax distillate, (P.), B., 346.
- Ostrem, C. T., Greenwood, D. A., Wilhelm, H. A., and Nelson, V. E., occurrence of mottled enamel in Iowa, A., 1413.
- Ostrogovich, A., γ -triazines. XXIV. Melamine. XXVIII. Dihydroxyphenyltriazine and its derivatives, A., 870, 1382.
- and Bena Median, V., γ -triazines. XXV. Property of *o*- and *p*-nitrophenyliminoketotriazidines (*o*- and *p*-nitrobenzylideneguanylcarbamide) of giving platinumoctachloride besides the normal platinumhexachloride; first two complexes of quadrivalent platinum with co-ordination number eight, A., 224.
- and Crasu, V., γ -triazines. XXVI. Dihydroxytriazinylformaldoxime and its salts, A., 224.
- and Galea, V., γ -triazines. XXIX. Conversion of aminothiol-alkyl-, aryl-, and arylalkyl-triazines into the corresponding aminohydroxy-derivatives; two new homologues, aminohydroxyethyl- and -propyl-triazine. XXX. Aminohydroxyaryltriazines. XXXI. Aminohydroxybenzyl- and -styryltriazines, A., 1254.
- and Tanislau, I., γ -triazines. XXVII. Synthesis of phenacetylbiuret and its transformation into dihydroxybenzyltriazine, A., 225.
- Ostrosinskaja, G. I., laboratory and industrial balance of preparation of anil diazo-black BC (direct diazo-black S), B., 264.
- Ostroumov, E. A., nature of the compounds of selenium in copper anode sludge, B., 273. Determination of selenium and tellurium in selenium sludge of sulphuric acid factories, B., 402.
- See also Tschervjakov, N. I., and Vinogradov, A. V.
- Ostrovski, E. P. See Rschevkin, S. N.
- Ostrovski, I. N. See Iljinski, V. P.
- Ostwald, U., and Du Pont Cellophane Co., Inc., laminating [sheets of regenerated cellulose], (P.), B., 1090.
- Ostwald, Wolfgang, X-ray and electron analysis of disperse systems, fibres, films, and interfaces, A., 162. Precipitation power and dielectric polarisation of alcohols, A., 164. Meta-structures of matter, A., 1072. Theory of flotation, A., 1201.
- and Riedel, R., dielectric measurements with eucolloids, A., 163. Colloid chemistry of metal soaps. II. Structure viscosity in benzene solution, A., 163.
- Osugi, S., and Endo, T., effect of lignin on decomposition of protein [in soils], B., 965.
- and Nisigaki, N., micro-determination of ammonia and formation of ammonia in paddy fields, B., 244.
- O'Sullivan, C. M. See McBain, J. W.
- O'Sullivan, D., influence of amyl ether on indicated fat percentage in the Gerber process [for milk analysis]; new test for suitability of amyl alcohol, B., 652.
- O'Sullivan, G. F. See Drew, J. P.
- Osvald, H., manuring of newly cultivated soils. IX. Sweden, B., 515.
- Ota, Yasuo. See Ueno, Sei-ichi.
- Ota, Yoritsune, emission band spectrum of the OD molecule, A., 1443. Concentrating the hydrogen isotope D by electrolysis of water. II. Production of heavy water and its apparatus, A., 1467.
- Otake, S., and Yamagishi, T., oryzanin "antineuritic vitamin." IV. Activity and thermostability of oryzanin hydrochloride. V. Activity of oryzanin hydrochloride, A., 1175, 1428.
- Otani, B., ternary aluminium-silver-magnesium alloys, A., 158.
- Otani, H., sulphopeptidase of moulds. I. *Aspergillus niger*. II. Separation of sulphopeptidase from protease. III. Comparison of animal and plant sulphopeptidase. IV. Presence of sulphopeptidase in various species of moulds, A., 1166.
- Otavi Minen- & Eisenbahn-Gesellschaft, working up substances containing vanadium, (P.), B., 157.
- Otero, P. B. See Cook, M. T.
- Othaz, E., treatment of cutaneous *Streptococcus* infections with intravenous cuprammonium sulphate, A., 1009.
- Othmer, D. F., separation of water from acetic acid by azeotropic distillation, B., 539.
- Otin, C., and Alexa, G., chromo-vegetable tannin combination tannage, B., 1008.
- and Dima, M., sulphonation of sunflower oil, B., 1101.
- Otolski, S., preparation of inositol from inositol phosphates, A., 210. Inositol-phosphoric acid compounds. III. Compounds of ferrie inositolphosphate with the sodium and potassium salts of certain hydroxy-acids, A., 746. Inositolphosphoric acid compounds, B., 173.
- Otsuka, H., analysis of by-product gas of coal liquefaction, B., 580. Vapour-phase cracking. II. Decomposition products, with special reference to cracked gas, B., 886.
- Ott, E. [with Demme, R., and Barth, V.], Walden inversion. II., A., 1228.
- and Krämer, Karl, Walden inversion. III., A., 1228.
- See also Frevel, L. K.
- Ott, H., effect of temperature on scattering of X-rays by solids according to quantum mechanics, A., 908.
- Ott, L. H., and Ficklen, J. B., direct photography of dust in air, A., 320.
- Otte, H. G., calcium in the human organism; physiology and metabolism, A., 509.
- Otte, O. M., metallic material, [e.g., silicon steel], (P.), B., 556.
- Ottenberg, R., bactericidal power of blood, A., 1170.
- Ottenhoff, P. See Böeseken, J.
- Ottenschläger, K., application of benzo fast copper dyes, B., 721.
- Ottensosser, F., Krupski, A., and Almasy, F., spectrum of diphtheria toxin, A., 787.
- Otterström, K. See Lévy, J.
- Otting, H. E., and Dietetic Labs., Inc., M. & R., milk-containing products, (P.), B., 429.
- Otto, C., regenerative coke oven, (P.), B., 837.
- Otto, G., effect of degree of neutralisation on dyeing of chrome-tanned leather, B., 564. Theory of leather dyeing, B., 945.
- Otto, M. See Dzielowski, K.
- Otto, M. M., electric moments of dialkoxalkanes, A., 683. Calculation of molar polarisation of solutes at infinite dilution with Hedebrand's formula, A., 927. Electric moments of alkyl borates and substituted boric acids, A., 1192.
- and Wenzke, H. H., electric moments of phenylethylene and substituted phenylethylenes, A., 430.
- Otto, R., Lüers and von Miller's method for determination of barley extract, B., 694.
- Otto & Co. G.m.b.H., C., coking oven, (P.), B., 55. Artificial stone from chamotte or grog, (P.), B., 632. Separation of sulphur from gases containing hydrogen sulphide, (P.), B., 891. Drawing off the gases of distillation from discontinuously operated chamber ovens, (P.), B., 1082.
- Ottolino, G. See Ciusa, R.
- O'Tuama, T. See Dillon, T.
- Oudman, J., nutrient intake and transport in leaves of *Drosera capensis*, L., A., 1178.
- Ouellet, C., and Rideal, E. K., investigation of adsorbed films by means of a photoelectric counter, A., 697.
- Ouer, R. A. See Lepkovsky, S.
- Ouriisson, J., determination of traces of chromium in titanium oxide pigments, B., 69.
- Ouroussov, N. See Marschalk, C.
- Ouzounov, G., histochemical examination of the fatty granular cells of the lung, A., 1263.
- and Mintchev, I., interaction between the alveolar epithelium of the lung and olive oil introduced by the trachea, A., 1263.
- Ovechkis, E., and Kamneva, Z., analysis of raw hides, B., 817.
- Over, E., jun. See Peacock, M. A.
- Overbaugh, S. C., and Sandin, R. B., germicidal properties and mercuration of alkylresorcinolcarboxylic acids, A., 1364.
- See also Allen, C. F. H.
- Overbeck, W. See Reiff, F.
- Overbeek, J. van, growth-hormone and dwarf type of growth in maize, A., 1039.
- Overholser, M. D., and Nelson, W. O., effect of oestrin and male hormone injected separately and simultaneously on the smooth muscle and epithelium of the seminal vesicle in the albino rat, A., 1173.
- See also Nelson, W. O.
- Overman, C. B. See Whittemore, E. R.
- Ovsthus, A. See Godal, A.
- Ow-Eschingen, M., metal [e.g., silver] coats on rubber articles, (P.), B., 1000.
- Owen, A. F., and Naugatuck Chem. Co., coated paper, (P.), B., 988.
- See also Rose, R. P.
- Owen, B. B., determination of dissociation constants of weak bases by silver iodide electrode, A., 170. Normal potential of the silver-silver iodide electrode from 5° to 40°, A., 1324.

- Owen, E. A., and Edmunds, I. G., determination of phase boundaries in the silver-zinc thermal diagram by X-ray analysis, A., 1199.
- and Iball, J., X-ray investigation of copper-tin alloys, A., 1198.
- and Pickup, L., X-ray study of interdiffusion of copper and zinc, A., 1066.
- X-Ray study of aluminium-zinc alloys at elevated temperatures, A., 1455.
- Pickup, L., and Roberts, I. O., lattice constants of five elements possessing hexagonal structure, A., 1450.
- and Rogers, J., X-ray study of copper-silver alloys, A., 1198.
- Owen, E. W. B. See Internat. Latex Processes.
- Owen, G. See Davies, W. M.
- Owen, K. A., use of galactose in differential diagnosis of jaundice, A., 516.
- Owen, O., nitrate in tomato soil, B., 373.
- Potassium in drainage from tomato houses, B., 373.
- Effect of fertiliser treatment on nitrogen contents of market-garden crops, B., 373.
- Potassium content of the pulp of "blotchy" tomato fruits, B., 741.
- Effect of manurial treatment on mineral constituents of chrysanthemums, B., 741.
- Owen, R. E. See Davies, E. R.
- Owen, W., and Pittsburgh Plate Glass Co., case-hardened glass, (P.), B., 101.
- Owen, W. H., cleaning or removing moisture from gases and vapours, (P.), B., 211.
- Owen, W. L., therapeutic products containing *Lactobacillus acidophilus*, (P.), B., 654.
- and Lacto-Yeast Co., Inc., preparation of *L. acidophilus* products, (P.), B., 974.
- and Mobley, R. L., liquid sugar as source of spirits, B., 603.
- Owens, H. S. See Thomas, Arthur W.
- Owens, J. S., instrument for measuring evaporation from surfaces, A., 1343.
- Power used in crushing, B., 481.
- Owens, R. D. J. See Bury, C. R.
- Owens, R. M. See Klooster, H. S. van.
- Owens-Illinois Glass Co., glass wool or other inorganic fibrous material, (P.), B., 902.
- See also Kinker, C. C., Lufkin, G., McBurney, J. E., and Slayter, G.
- Owrutsky, H., theory and practice of combination tannages, B., 644.
- Oxe, M., and Jensen, B. N., determination of salol in tablets, B., 173.
- Oxentian, V. G., microbiological method for determining lime requirements of soils variously podsolised, B., 686.
- Oxford, A. E., and Raistrick, H., biochemistry of micro-organisms. XLVI. i-Erythritol, a metabolic product of *Penicillium brevicompactum*, Dierckx, and P. cyclopium, Westling, A., 1028.
- Raistrick, H., and Simonart, P., biochemistry of micro-organisms. XLIV. Fulvic acid, a new crystalline yellow pigment, a metabolic product of *Penicillium griseofulvum*, Dierckx, P. flexuosum, Dale, and P. brefeldianum, Dodge, A., 786.
- Oxley, C. D., seasonal variation of the percentage butter fat content of milk: results of individual cow tests, B., 872.
- Oxweld Acetylene Co. See Keir, J. M., and Miller, W. B.
- Oyama, Y., motion of granular or pulverous materials in a horizontal rotating cylinder. II. Mechanism of mixing and determination of mixing velocity, B., 833.
- Oyamada, T., constitution of fustin. I. Constitution of the wood of *Rhus succedanea*, L.; non-glucoside nature of fustin. II. and III. Constitution of haeic acid. IV. Constitution of fustin and synthesis of methylfustin, A., 757.
- Ozaki, J., and Kasai, B., oil of the eggs of *Bombyx mori*, A., 1145.
- P.
- Paal, H., significance of thyroid for respiration of tissue sections from warm-blooded animals, A., 410.
- Action of thyroid activation on iodine economy of thyroid tissue, A., 540.
- and Motz, G., determination of thyroxine-iodine by hydrazine, A., 1171.
- Paasche, W. See Lehmann, E.
- Paauw, F. van der, determination of carbon dioxide assimilation, A., 549.
- Influence of temperature on respiration and carbon dioxide assimilation of green algae, A., 549.
- Pabst, See Bruns, H.
- Pabst, A., crystal structure of sulphohalite, A., 286.
- Pabst, E. See Wagner, Hans.
- Pace, G. L. See Munson, J. J.
- Pacha, M. S., ship fumigation by the Clayton method, B., 527.
- Pacheco, G., and Rodrigues, C., action of the *B. pullorum* and *B. gallinarum* group on milk-media and on neutral-red, A., 664.
- Fermentation of sugars by the group [*Salmonella*] *pullorum-gallinarum*, A., 1029.
- Pachlopnik, F., small laboratory gas generator, B., 341.
- Pachomova, E. See Fabritzjev, B.
- Pacific Coast Borax Co. See Conell, G. A., and Newman, A.
- Pacific Lumber Co. See Carson, F. L., and Mitscherling, W. O.
- Pacini, A. J., and Amer. Research Products, Inc., antirachitic substances, (P.), B., 1068.
- Packard, W. H. See Holmes, A. D.
- Packard Motor Car Co. See Craig, W. B.
- Packendorff, K., catalytic reduction reactions. II., A., 1120.
- and Leder-Packendorff, L., hydrogenolytic fission of malonic ester and malonic ester derivatives, A., 607.
- See also Zelinski, N. D.
- Packer, J. See Bull, (Miss) J. E.
- Packers Equipment Development Co. See Laabs, W.
- Paesu, E., application of principle of optical superposition in ketose series; preparation of the true α -fructose (2:6)penta-acetate, A., 200.
- Configuration and mechanism of hydrolysis of maltose derivatives with ortho-ester structure, A., 609.
- Ketone sugar series. IV. Preparation of methyl- and ethyl-fructoside acetates, A., 735.
- and Cramer, F. B., ketone sugar series. V. Validity of Hudson's rules of isorotation in the ketose group; preparation of the true α -fructose <2:7> penta-acetate, A., 1484.
- and Rich, F. V., preparation of methyl-maltoside hepta-acetate with ortho-ester structure, A., 609.
- Pacyna, A., antiknock composition, (P.), B., 759.
- Pacz, A., highly plastic colloidal tungsten compounds, (P.), B., 900.
- Paddock, L. S., and Swift & Co., curing of meat, (P.), B., 123.
- Padfield, H. J. H. See Cullinane, N. M.
- Padmanabhan, R., apparatus for fractional solidification, A., 840.
- Absorption spectrum and constitution of carvone hydrosulphide, A., 1300.
- Fluorescence in cyclohexane, A., 1446.
- Modified photographic method for substances of small rotatory dispersion, A., 1475.
- and Jatkar, S. K. K., optical rotatory dispersion of terpenes, A., 496.
- Optical rotatory dispersion of α - and β -pinenes in the ultra-violet, A., 684.
- Anomalous rotatory dispersion of *L*- β -pinene. I., A., 1447.
- Padve, R. R. See London, E. S.
- Paech, K., natural regulation of protein metabolism in plants, A., 420.
- Paackelmann, W., Pfeffer, P., and Udluft, A., weathered Devonian and carboniferous soils in North-East Sauerland, B., 242.
- Pätsch, R. See Scholder, R.
- Page, A. B. P., fumigation, B., 517.
- and Lubatti, O. F., application of fumigants to ships and warehouses. IV. Vaporiser for ethylene oxide, B., 832.
- Page, A. G., and Union Oil Co. of California, heating and cracking of oil, (P.), B., 296.
- Page, G. A. See Wilson, H.
- Page, G. R., pharmacopoeial tests. I. Quinine ethyl carbonate, atropine sulphate, potash alum, aloin, solution of cresol with soap. II. Chiniofon, codeine, simple solution of iodine, sodium phosphate, B., 205, 606.
- See also Hampshire, C. H.
- Page, G. W., benzol recovery, B., 1124.
- Page, I. H., effect on renal efficiency of lowering arterial blood-pressure in essential hypertension and nephritis, A., 887.
- Depressor extracts of human blood and the vascular action of extracts of rabbit and dog blood, A., 894.
- Pressor substances from body-fluids of man in health and disease, A., 894.
- and Bülow, M., kephalin from human brain. V. Oxygen uptake of phosphatides and their acids in presence of catalysts, A., 376.
- See also Pasternak, L.
- Page, J. M., jun. See Standard Oil Co.
- Page, J. W. See Booher, L. E.
- Page, R. T., constant-flow orifice meters of low capacity, A., 1342.
- Pagel, W., and Stott, L. B., determination of proteins of blood-serum and its value in tuberculosis, A., 386.
- Paget, M., and Dupont, Y., clearing agent for blood; application to determination of blood-sugar, A., 230.
- Deproteinisation of biological liquids; application to micro-determination of lactose in cows' milk, A., 773.
- Parturier, G., and Levin, G., chemical composition of normal and cataract crystalline lenses, A., 1008.
- See also Langeron, L.
- Pagon, W. W. See Ober, B.
- Pahl, M., and Hosemann, R., investigation of weak radioactive elements in absence of ultra-radiation, A., 802.
- Pahlke, H. See Wolf, K. L.

- Pai, N. G., valency angles of oxygen and sulphur, A., 283. Raman spectra of dimethyl and diethyl trisulphides, A., 681. Raman spectra of organo-metallic compounds, A., 681. Raman spectrum and constitution of fuming sulphuric acid, A., 1445.
- Paic, *Miloslav*. See Calvet, J., and Trillat, J. J.
- Paic, *Mladen*, and Deutsch, V., refractometric determination of serum-proteins, A., 230.
- and Philippe, M., pigment elaborated by the diphtheria bacillus, A., 408. See also Minz, B.
- Pailer, H. See Späth, E.
- Paillard, M. See Briner, E.
- Paillas, J. E. See Cornil, L., and Olmer, J.
- Paillet, E. C., and Silk-Eze Corp., fabric-cleaning composition [detergent], (P.), B., 898.
- Paillet, A., biology of *Cheimatobia brumata* and its control, B., 472. Winter treatment of fruit trees by anthracene oil emulsions, B., 472.
- Paindavoine, L., pigments [containing calcium fluoride], (P.), B., 110.
- Paine, H. S., Kingsbury, R. M., and Yanovsky, E., preparation of inulin, (P.), B., 970.
- Paine, (Miss) P. A., and France, W. G., adsorption at crystal-solution interfaces. VII. Effect of stirring and growth rates on habit and dye adsorption of alum crystals; influence of acid and alkali media on habit of alum crystals, A., 697.
- Paizi, A., physical and chemical constants of fig-seed oil, B., 859.
- Pak, C., and Read, B. E., action of ephedrine quaternary halide compounds, A., 893.
- Pakhomova, O. I. See Maslov, I. G.
- Pakschver, A., and Lurie, G., evaporation of binary liquid mixtures, A., 157. See also Skljarenko, S.
- Pal, H. K. See Ghose, M. N.
- Pal, N. L., respiration of conjugating *Spirogyra* with reference to fat metabolism, A., 264.
- Pal, R. K., and Prasad, S., comparative effect of adding different sugars to the perfusion liquid through frog's heart and the influence of insulin over it, A., 1151.
- Palache, C., lindgrenite, a new mineral, A., 726, 1345.
- Palacios, J., and Barasoain, J. A., crystal structure of pyrophyllite, $Al_2(OH)_2Si_4O_{10}$, A., 686.
- Hengstenberg, J., and De la Cueva, J. G., study of crystal orientation by means of Weissenberg X-ray goniometer, A., 433.
- and Salvia, R., crystal structure of naphthazarin, A., 571. See also De la Cierva, P.
- Palei, P. See Zacharova, T. I.
- Palei, T. J. See Sotnikov, E. I.
- Palfray, L., mineral salts of carbamide, A., 737.
- and Leman, A., chemical activity of the naphtholic hydrogens of 1:7-dihydroxynaphthalene, A., 856.
- and Sabetay, S., Cannizzaro reaction applied to the aliphatic and arylaliphatic series, A., 491. See also Garnier, R., and Sabetay, S.
- Palfreeman, H., and Knibbs, N. V. S., [electrolytic] production of [p-benzo]quinone and hydroquinone [quinol], (P.), B., 796.
- Palibin, P. See Arzimovitch, L.
- Palkin, A. P., physico-chemical study of thermo-phosphate production. IV. Preparation of trisodium phosphate, B., 304.
- and Brikman, N. M., solubility of calcium sulphate in saturated solutions of potassium and sodium chlorides, A., 441.
- and Golovkov, M. P., physico-chemical study of thermo-phosphate production. III. Reaction between apatite and soda, B., 304.
- Palkin, S., acids of pine oleoresin and rosin, A., 495. See also Matlack, M. B.
- Palladin, A. V., Borshkovski, S. E., and Palladina, L. I., muscle activity and oxidation processes. II. Effect of training and fatigue on muscle-glutathione, A., 1522.
- and Guli, M. F., effect of starvation on aminogenetic and proteolytic processes in the cerebrum, A., 1529.
- and Kaschpur, A. M., effect of training and fatigue on power of muscle tissue to reduce methylene-blue by the Thunberg method, A., 1522.
- and Kudrjavzeva, A. V., influence of phosphorus poisoning on creatine-phosphoric acid, lactacidogen, and creatine content of red and white muscle, A., 1534.
- Maliar, S., and Rozenberg, A., influence of hunger on administered phenol, A., 1530.
- and Palladina, L. I., effect of fatigue on oxidation of phenol in various diets, A., 1530.
- and Persova, E. M., influence of character of diet on synthesis of menthologlycuronic acid, A., 1530.
- and Raschba, E. J., creatine content of different parts of the brains of vertebrates. I. and II., A., 1520. Influence of training [by electrical stimulation] and fatigue on catalase of muscle, A., 1535.
- Raschba, E. J., and Helman, R. M., chemical composition of parts of the nervous system. I. Grey matter of parts of the central nervous system of dogs. II. Vegetative nervous system of cows, A., 1520.
- and Savron, E., effect of tetrahydro- β -naphthylamine on creatinephosphoric acid, creatine, and lactacidogen of white and red muscle, A., 1532.
- and Sigalova, R. R., creatinephosphoric acid content of fish muscle, A., 1521.
- Palladina, L. I., influence of acid diet on creatine excretion, A., 1530. See also Palladin, A. V.
- Pallanch, R. A., flotation of gold, B., 552.
- Pallot, A. C., boiler practice in H.M. Office of Works, with special reference to use of blended fuels, B., 833.
- Pallu, R. See Faure, A.
- Palmaer, W., behaviour of rustless steel towards corrosion, B., 635.
- Palmer, A. H. See Linderström-Lang, K.
- Palmer, C. W., and Celanese Corp. of America, spinning [fast-coloured artificial filaments], (P.), B., 144.
- Palmer, D. F., *Dothionella* rot [of avocados], B., 1158.
- Palmer, E. V. See Vengerova, V. J.
- Palmer, F., jun., method of attaching a fluorite window to glass apparatus, A., 1342.
- Palmer, F. R., and Carpenter Steel Co., ferrous alloy; [nickel-chromium steel]. (P.), B., 907.
- Palmer, F. S. See Lutz, R. E.
- Palmer, H. J., re-process cheese, (P.), B., 380.
- Palmer, J. W. See Meyer, Karl.
- Palmer, L. See Dunlop Rubber Co.
- Palmer, L. A., mortars suitable from the viewpoint of water-tightness in unit masonry, B., 903.
- Palmer, L. S., and Nelson, J. W., Jenner-Kay and Bodansky methods for determining phosphatase in plasma and serum, A., 403. See also Lasby, H. A., Mason, I. D., Nelson, J. W., Nilson, H. W., Powell, M. E., and Wallis, G. C.
- Palmer, R. G. See Ungar, G.
- Palmer, W. G., and Clark, R. E. D., adsorption on measured surfaces of vitreous silica, A., 818.
- Palmer, W. S., gold in petrified wood, B., 953.
- Palmhart, H. See Gradinesco, A.
- Palmiter, D. H. See Keitt, G. W.
- Palmlov, A. See Nyman, E.
- Palmrose, G. V., mill test for exact determination of combined sulphur dioxide [in sulphite-pulp cooking], B., 490.
- Paloheimo, I. See Paloheimo, L.
- Paloheimo, L., and Paloheimo, I., photometric method for determination of chromic oxide in digestibility research after the so-called quantitative indicator method, A., 1271.
- Palomaa, M. H., Salmi, E. J., Jansson, J. J., and Salo, T., ether-like compounds. XIV. Acid hydrolysis of esters of tertiary alcohols, A., 473.
- Salmi, E. J., and Wallin, L. [with Siitonen, T. A.], ether-like compounds. XV. Ether-lactones with five-membered ring, A., 730.
- and Tukkimäki, K. R., ether-like compounds. XVI. Influence of oxygen in the atomic chain on esterification and hydrolysis, A., 846.
- Pamfil, G. See Urechia, C. I.
- Pamfilov, A. V., Chudjakov, A. S., and Standel, E. G., action of chlorine on [a mixture of coal and] titanium dioxide, A., 942.
- and Kagan, S. L., determination of small concentrations. VIII. Carbon monoxide, A., 718.
- and Kiparisov, G. N., electrochemical extraction of lead compounds from ores, B., 312. See also Krauze, K. E.
- Pan, C. L., uniformity trials with rice, B., 646.
- Pan, L. C., concentrated copper cyanide plating baths, B., 997.
- Pan, Z. H., and Chiang, C. H., pyrophosphate method for determination of zinc, A., 1093.
- Panciera, Z. See Bird, J. C.
- Pandalai, K. M., synthesis of substituted cinechonic acids with use of weak bases as condensing agents, A., 356. Mechanism of photographic development; induced reduction of silver halides by sodium sulphite in presence of organic developers and influence of alkali on the reaction, A., 831. "Electron transfer" theory applied to reactions in the (photographic) developing bath, A., 1088.

- Pando, *G.*, protective action of copper and spleen extract in *Bartonella* anemia in rats, A., 381.
- Pandya, *K. C.* See Khan, *A. A.*, and Kurien, *P. N.*
- Panelte Corporation. See Edwards, *E. S.*
- Paneth, *F. A.*, and Fay, *J. W. J.*, concentration of artificially-produced radioelements by an electric field, A., 802.
- and Glückauf, *E.*, helium content of the stratosphere, A., 1477.
- Hofeditz, *W.*, and Wunsch, *A.*, free organic radicals in the gaseous state, V., A., 603.
- and Lautsch, *W.*, free organic radicals in the gaseous state. VI. Existence of free benzyl, A., 603.
- and Loleit, *H.*, free organic radicals in the gaseous state. IV. Synthesis of antimony cacodyl and related substances by use of free methyl and free ethyl, A., 603.
- and Thomson, *G. P.*, attempts to produce helium 3 in quantity, A., 1212.
- See also Günther, *P. L.*
- Pangels, *R.* See Keppeler, *G.*
- Panhandle Refining Co. See Sims, *W. F.*
- Pankov, *A. M.*, soil-adsorption complex and physical properties, B., 164. Determination of physical properties of soils using non-aqueous liquids, B., 198.
- and Shavrin, *P. I.*, adsorption complex of soils of the Premanych region, B., 164.
- Pankow, *G. W.*, and Scherrer, *P.*, anomaly in specific heat of lithium, A., 1454.
- See also Meyer, *K. H.*
- Pankratz, *D. S.* See Amberson, *W. R.*
- Pannekoek, *A.*, and Verwey, *S.*, Stark effect of hydrogen in first type stellar spectra, A., 908.
- Pannikar, *K. P. N.* See Joshi, *S. S.*
- Panning, *G.* See Schuster, *F.*
- Panoff, *A.*, effect of administration of carbohydrate, protein, or fat on blood-sugar of children, A., 389.
- Panopoulos, *J.*, and Megalioikonomos, *J.*, determination of acidity of flour, B., 426.
- Panse, *F. G.* See Jackson, *F. K.*
- Pantelëev, *P. G.*, ilmenite sands on the Azov Sea, A., 1100.
- Panteleymonoff, *B.*, water from the Dead Sea, A., 600.
- Pantenburg, *V.*, and A.-G. für Chem. Prod. vorm *H. Scheidemandel*, formation of small-particle products from gelatinising substances, (P.), B., 420.
- Pantin, *C. F. A.*, response of the leech to acetylcholine, A., 894.
- Pantschenko, *G. N.*, iodometric determination of titanium, uranium, molybdenum, and vanadium in presence of iron by liquid amalgams, A., 951. Colorimetric determination of molybdenum in special steels, B., 952.
- and Raetzki, *M. V.*, colorimetric determination of titanium in cast iron and steel, B., 952.
- Pantschenko, *S. I.* See Kuznetsov, *M.*
- Pantschenko-Jurewicz, *W. von.* See Kraut, *H.*
- Pantulu, *D. V. R.* See Bates, *L. F.*
- Paolini, *V.*, reduction reactions and oxidation reactions; [aromatic aldehydes and Fehling's solution], A., 1497.
- Pap, *L.*, effect of humidity on moisture determination, B., 209.
- Papa, *D.* See Hart, *D. H.*
- Papafil, *M.*, amines from phenylenediamines and metallic salts, A., 1087.
- See also Cernatescu, *R.*
- Papapetrou, *A.*, superconductivity, A., 154, 814.
- Pape, *C. B.*, and California Prune & Apricot Growers' Assoc., preparation and packing of prunes, (P.), B., 876.
- Papee Machine Co. See Bullock, *F. J.*
- Paper Makers Chemical Corporation. See Perry, *R. S.*
- Paper Patents Co. See Fleck, *L. C.*
- Papierfabrik Spechthausen Akt.-Ges., preparation of wet-spinning waste for manufacture of paper, (P.), B., 97.
- Papilian, *V.*, and Preda, *V.*, influence of sodium bicarbonate on adrenaline glycaemia, A., 641. Effect of sodium hydrogen carbonate on glycaemia from pilocarpine and from liguire of the portal vein, A., 1534.
- Papish, *J.* See O'Leary, *W. J.*
- Papkov, *S.*, surface tension and solvent action of organic liquids, A., 819. Coagulation of organosols of cellulose nitrate by electrolytes. I., A., 1319.
- Papkova-Kvitel, *T. P.*, influence of alcohol on viscosity of sols of benzopurpurin and chrysophenin, A., 821.
- Papp, *S.* See Jendrassik, *A.*
- Pappenhausen, *L. A.* See Foulk, *C. W.*
- Pappenheimer, *A. M.*, and Maechling, *B. H.*, inclusions in renal epithelial cells following use of bismuth preparations, A., 1021.
- Paranjpe, *G. R.*, and Deshpande, *P. Y.*, dielectric properties of some vegetable oils, A., 1192.
- and Naik, *Y. G.*, counting dust nuclei in air, A., 467.
- and Rajderkar, *E. B.*, temperature variation of viscosities of aqueous solutions of strong electrolytes, A., 295.
- Paraschivescu, *Z.* See Slatineanu, *A.*
- Parbery, *N. H.*, mineral constituents in relation to chlorosis of orange leaves, B., 282.
- Parchomenko, *V.*, reagent "kontakt." I. Sulphonation of liquid petrolatum, B., 1030.
- Pardon, *H.* See Biltz, *H.*
- Parfentiev, *T.* See Jacyna, *W.*
- Parfianovitch, *U. A.* See Arzibischev, *S. A.*
- Parfitt, *A. W.*, and Gypsum, Lime, Alabastine, Canada, Ltd., [gypsum] wall-board, (P.), B., 727.
- Parfitt, *E. H.* See Spitzer, *G.*
- Parga-Pondal, *J.* See Kühl, *Hans.*
- Parhon, *C. I.*, and Cahane, *M.*, hepatic chlorine in hyperthyroidised animals, A., 1521.
- and Ornstein, *I.*, effect of thyroidectomy on the lipid, fatty acid, cholesterol, and protein content of blood-serum, A., 1517.
- and Werner, *G.*, carotenæmia in animals treated with thyroxine or thyrotropic hormone; carotene in adrenals after injection of thyroxine, A., 790. Blood-chemistry of birds after destruction of the comb or enucleation of the eyeballs, A., 1001.
- Parikh, *P. H.* See Meldrum, *A. N.*
- Parini, *V.*, determination of paraffin in asphalt, B., 1028.
- Paris, *A. J., jun.*, treatment of heavy hydrocarbon oils, (P.), B., 760.
- Paris, *R.*, thermometric study of precipitation of insoluble ferrocyanides, A., 37.
- Pâris, *R.* See also Lange, *J.*
- Parish, *H. J.* See O'Brien, *R. A.*
- Parisi, *E.*, gum of the lemon tree, A., 1180.
- and De Vito, *G.*, volumetric determination of proteins in milk, B., 171.
- Paritzki, *M. V.* See Poljakov, *M. V.*
- Park, *B.*, and Lewis, *E. J.*, determination of small amounts of lead in copper, B., 636.
- Park, *C.* See Yoshida, *U.*
- Park, *C. R.*, and Morris, *V. N.*, dispersion of channel gas black in rubber; effect of stearic acid and other so-called dispersing agents, B., 643.
- Park, *L. C.*, grinding machine, (P.), B., 338.
- Park, *P. R.*, and Park, Inc., *P. R.*, marine plant product, (P.), B., 973.
- Park, Inc., *P. R.* See Park, *P. R.*
- Parker, *A. E.*, partial resolution of the Be α line 4572.69 Å. and probable spin of the Be⁹ nucleus, A., 1. Band systems of MgCl, CaCl, and SrCl, A., 562.
- Parker, *A. S.* See Harris, *L.*
- Parker, *C. S.* See Bleachers' Assoc.
- Parker, *E. A.* See Clark, *G. L.*
- Parker, *E. R.*, effect of zinc sulphate sprays for mottle leaf of citrus, B., 246.
- Parker, *G. H.*, what part of the melanophore system in *Fundulus* is acted on by adrenaline? A., 900. Colour changes in the catfish *Ameiurus* in relation to neuro-humours, A., 1157.
- Parker, *H. E.* See Imperial Chem. Industries.
- Parker, *H. F.*, and Bendix Brake Co., brake linings, (P.), B., 338.
- Parker, *H. H.*, and Du Pont Rayon Co., viscose, (P.), B., 96. Artificial [silk] threads, (P.), B., 300.
- Parker, *H. K.* See Baker, *J. C.*
- Parker, *J. G.*, and Stather, *F.*, quantitative tannin analysis, B., 862, 1007.
- Parker, *J. R.*, Shotwell, *R. L.*, and Morton, *F. A.*, use of oil in grasshopper baits, B., 327.
- Parker, *M. M.*, interrelation between p_H of soil and grown rate of celery, B., 117.
- Hester, *J. B.*, and Carolus, *R. L.*, effect of soil conditions on growth and composition of vegetable crops as influenced by soil reaction, B., 422.
- Parker, *M. W.*, and White, *C. E.*, sodium press, A., 1099.
- Parker, *P. T.* See Gilman, *H.*, and Kirkpatrick, *W. H.*
- Parker, *R. H.* See Burrows, *G. J.*
- Parker, *T. W.*, and Hirst, *P.*, preparation and examination of thin sections of set cement, B., 1143.
- See also Lea, *F. M.*
- Parker, *Z. T.*, oxidising furnace [for molybdenite], (P.), B., 1051.
- Parkes, *A. S.*, and Zuckerman, *S.*, experimental hyperplasia of the prostate, A., 791.
- See also Callow, *R. K.*
- Parkes, *G. D.*, and Tinsley, *S. G.*, acetophenone- ω -sulphonic acid, and phenylglyoxalarylhydrazone- ω -sulphonic acids, A., 84.
- See also Chattaway, *F. D.*
- Parkhurst, *G. L.* See Standard Oil Co.
- Parkin, *H. M.* See Earl, *J. C.*
- Parkin, *W. H.*, dry disinfection of the atmosphere, (P.), B., 176.
- Parkins, *W. M.* See Swingle, *W. W.*
- Parkinson, *A. E.*, and Wagner, *E. C.*, determination of aldehydes by hydrogen sulphite method, A., 102.
- Parkinson, *D. B.* See Herb, *R. G.*

- Parkinson, E., gas treatment, (P.), B., 883.
- Parkinson, J. C., and Pittsburgh Plate Glass Co., double glazing, (P.), B., 23. [Cream-coloured] opaque glass, (P.), B., 674.
- Parks, G. S., Barton, L. E., Spaght, M. E., and Richardson, J. W., viscosity of supercooled liquid glucose, A., 290.
- and Spaght, M. E., viscosity data for boron trioxide, A., 1313.
- Spaght, M. E., and Barton, L. E., viscosity data for commercial rosin and abietic acid, B., 510.
- Warren, G. E., and Greene, E. S., *tert*-butyl alcohol as solvent for cryoscopic mol.-wt. determinations, A., 699.
- Parks, L. R., and Barnes, C. R., application of the glass electrode to dairy products, B., 285.
- and Bartlett, P. G., dyeing [wool] with acid dyes, B., 988. Principles of dyeing with basic dyes, B., 1090.
- and Beard, H. C., classification of dyes based on the theory of solutions and colloids, B., 796. Principles of dyeing with salt dyes, B., 1090.
- Parks, W. G., and Prebluda, H. J., hexammine cobaltic compounds in gravimetric determination of vanadium, A., 1339.
- Parmelee, A. E. See Du Pont de Nemours & Co., E. I.
- Parmelee, C. W. See Chesters, J. H.
- Parmenter, E. F. See Kraus, C. A.
- Parnas, J. K., ammonia content and formation in blood. XI, A., 103.
- and Baranowski, T., initial phosphorylations of glycogen, A., 1538.
- and Lutwak-Mann, C., ammonia content and ammonia formation in muscle. XXII. I. Determination of adenosinetriphosphoric acid. II. Second ammonia-forming substance of muscle, A., 1004.
- and Ostern, P., chemical reactions in muscle. IX. Rôle of phosphagen, A., 1150.
- Ostern, P., and Mann, T., chemical reactions in muscle. II. and III, A., 239, 387. Nature and physiological function of muscle ammoniogenesis, and co-ordination of chemical processes in muscle, A., 387.
- Parnell, J. W., controlling spreading of internal parasites of the horse, B., 375.
- Parodi, M. See Garino, M.
- Parpart, A. K., and Shull, J. C., solvent-water in normal mammalian erythrocyte, A., 999. Permeability of the erythrocyte to glycerol, A., 999.
- See also Jacobs, M. H.
- Parr, L. M., apparatus for production of small pressure differences, A., 58.
- Parratt, L. G., natural X-ray line widths: correction for finite resolving power, A., 3. Practicality of etched quartz crystals for X-ray spectrometers, A., 57. X-Ray reflectivity and resolving power of the (10-0) planes of etched quartz crystals, A., 686.
- Parravano, N., chemical means of increasing fertility of Italian soil, B., 373.
- and Caglioti, V., development of pigment properties in titanium dioxide, B., 109.
- Parrett, A. N. See Du Pont de Nemours & Co., E. I.
- Parrish, C. I. See Hurd, C. H.
- Parrish, E. See Wood, J. W.
- Parrish, P., Gaillard-Parrish liquid-phase system of sulphuric acid manufacture, B., 898.
- Parrod, J., products of oxidation of 5- α , β , δ -tetrahydroxybutyl-(*d*-arabino)glyoxaline with nitric acid, A., 759. Formation of hydrogen cyanide and carbamide by oxidation of fructose in ammoniacal solution at room temperature, A., 1109.
- See also Loeper, M.
- Parry, A. A. See Nasset, E. S.
- Parry, E. G. See Heilbron, I. M.
- Parry, E. J. See Stevens, H. P.
- Parry, C. A. See Bury, C. R.
- Parry, V. F. See Burke, S. P.
- Parschin, A. N., transformation of adenosinetriphosphoric acid (adenyl pyrophosphate) in the isolated frog heart, A., 109. Enzymic decomposition of adenosinetriphosphoric acid (adenyl pyrophosphate) in heart muscle, A., 122. Extractives of dog and rabbit muscle, A., 1266. Action of *p*-phenylenediamine on the chemical processes in striped muscle, A., 1533.
- Parsons, A. L., linear mineralogical arithmetic, A., 952.
- Parsons, G. M. See Ullman, R. B.
- Parsons, H. T. See Lease, J. G.
- Parsons, J. F., and Nat. Vaccine & Antitoxin Inst., treatment of psyllum seeds, (P.), B., 924.
- Parsons, J. L., and Hammermill Paper Co., stable nitrocellulose, (P.), B., 447.
- Parsons, J. R., and United States Gypsum Co., treatment of ceramic material: [manufacture of light-weight heat-insulating and sound-absorbing tiles], (P.), B., 805.
- Parsons, L. G. B. See Bone, W. A.
- Parsons, L. W. See Voorhees, B. V.
- Parsons, R. J. See Davenport, L. F.
- Partansky, A. M. See Henry, B. S.
- Parti, Y. P. See Asundi, R. K.
- Partington, H., design and operation of upwardly-heated vertical retorts, B., 534.
- Partington, J. R., action of perchloric acid, A., 715. Origin of chemistry: definition of flame, A., 840. Ancient Chinese treatise on alchemy, A., 1219. Chemistry in the Bucheum, A., 1343. Adolf von Baeyer, 1835-1917, A., 1477.
- and Bahl, R. K., periodic acid and periodates. IV. Reactions of disodium paraperiodate with soluble salts of zinc and metals of the alkaline earths, A., 51.
- and Cowley, E. G., dipole moment of acetonitrile, A., 568. Dipole moments of ethyl- and phenyl-carbimides, A., 916.
- and Skeen, J. W., oxidation-reduction potentials in non-aqueous solutions. I. Systems cuprous-cupric chlorides and ferrous-ferrie chlorides in pyridine, A., 38.
- and Stonehill, H. I., thallous-thallic oxidation-reduction potential, A., 1326.
- and Winterton, R. J., solubility of sodium thiocyanate in ethyl alcohol, A., 25.
- See also Arndt, F., Bahl, R. K., Cowley, E. G., Maxwell, W. R., and O'Neill, L.
- Parton, H. N., thermodynamic study of systems of the type $PbCl_2-RCl-H_2O$ at 25°. IV, A., 582.
- See also Brasher, (Miss) D. M.
- Partridge, E. P. See Conley, J. E., Fraas, F., Gabriel, A., and Schroeder, W. C.
- Partridge, H. M., Bowles, J. A. C., and Goldfeder, A., determination of p_H of normal and malignant tissues with the glass electrode and vacuum tube null indicator, A., 270.
- Partridge, H. W. See Rowe, F. M.
- Partridge, J. H. See Gen. Electric Co.
- Partridge, R. See Blank, J. H.
- Parturier, G. See Paget, M.
- Pascal, P., and Patry, M., telluric acids, A., 593.
- Paschevski, D., and Tabunov, K. A., Ural bauxite as a catalyst of the reaction of reduction of sulphur dioxide to sulphur, B., 802.
- Paschke, B., detection of foreign fats in cacao butter, B., 31.
- Pascual, J., and Rebollo, R. R., α -amino ketones. II. Experiments based on Gabriel's synthesis, A., 800.
- Pasierbinski, I. S., resonance series in selenium vapour, A., 137.
- Pasinski, A. See Petrov, I.
- Paskuj, J. See Bodnár, J.
- Passagez, A., history of chemical catalysis, A., 953.
- Passedout, H. See Carré, P.
- Passek, V., and Rubinstein, M., transplantation of endocrine glands and blood-sugar, A., 1142.
- Passelaigue, P. See Dumazert, C.
- Passerini, L., chemical and physical characteristics of water of crystallisation. I. Hydrates containing up to three molecules of water. II. Hydrates containing more than three molecules of water, A., 1300. Chemical and physical characteristics of water contained in colloidal substances. I. Some organic colloids. II. Some inorganic colloids, A., 1320. Constitution of zeolites, A., 1345.
- and Rollier, M. A., structure of telluric acid, A., 1056.
- Passerini, M., and Neri, A., carbylamines. XX. Reaction between naphthols and aromatic carbylamines, A., 485.
- and Ragni, G. [with Maresco, W., and Picciaci, L.], derivatives of *p*-phenetidine, A., 339.
- and Ridi, M., reaction between aminopyridine and phenylhydrazine, A., 501.
- Passmore, R., synthetic diet for rabbits, A., 1529.
- See also Johnson, R. E.
- Passynski, A., influence of electric field on viscosity of colloid solutions. I. External electro-viscous effect in benzene solutions of smoked sheet caoutchouc, A., 444.
- Pasteels, J. J., determinism of the entry of the egg into maturation in some marine invertebrates, A., 1271.
- Pasternack, R., Cragwall, G. D., and Pfizer & Co., C., leather, (P.), B., 115.
- Giles, W. R., and Pfizer & Co., C., stable calcium gluconate solution, (P.), B., 991.
- Pasternak, L., and Page, I. H., action of thyroxine and thyroïdin on lipin and fat metabolism, A., 127.
- Pastor, C. T., rubber thread and rubber-thread textiles, (P.), B., 1155.
- Patai, J. See Rosenthal, E.
- Patat, F. [with Hoch, H.], photochemical dissociation of methyl and ethyl alcohols, A., 1211.

- Patat, *F.*, and Sachsse, *H.*, thermal decomposition of acetaldehyde and propionaldehyde, A., 708.
See also Herzberg, *G.*, Löcker, *T.*, and Sachsse, *H.*
- Patch, *E. M.*, calcifying factors in diet of salamander larvae, A., 1036.
- Pateo, Inc. See Baylis, *W. S.*
- Patek, *J. M.*, flotation process for non-sulphide [tin and tungsten] ore, (P.), B., 505.
- Patel, *A. M.*, absorption of substantive dyes by cellulose and its modifications, B., 989.
See also Desai, *P. G.*
- Patent & Licensing Corporation. See Backman, *B. C.*, Fain, *J. M.*, Heitmann, *M. I.*, Kirschbraun, *L.*, Levin, *H. L.*, Limburg, *H.*, Loebel, *Z. C.*, Pinoff, *F. M. O.*, and Van Heurn, *F. C.*
- Patent Treuhand-Gesellschaft für Elektrische Glühlampen m.b.H., forming an electrode or a contact surface on an electric resistance of semi-conducting materials, (P.), B., 415. Apparatus for melting glass electrically, (P.), B., 804. Electric-discharge devices [metal-vapour lamps], (P.), B., 1149.
See also Gen. Electric Co.
- Pateras, *S.* See Schmitz-Dumont, *O.*
- Paternosto, *P. G.*, and Del Carlo, *E.*, copper tetramminosulphate. I. Preparation, analysis, and preservation, A., 714.
See also Del Carlo, *E.*
- Paterson, *D. D.*, growth, yield, and composition of certain tropical fodders, B., 867.
- Paterson Parchment Paper Co. See Wrede, *H.*
- Pathak, *K. B.*, condensation of ω -bromoacetophenone with s -phenyl- o -amino-phenylthiocarbamide, A., 1386.
- Patnaik, *M.*, iodine content of Indian foodstuffs, A., 1154.
- Patoir, *A.*, Patoir, *G.*, Bedrines, and Payen, experimental intoxication by apiole: toxicity; lesions of the liver and kidney, A., 1533.
- Patoir, *G.* See Patoir, *A.*
- Patrick, *J. C.*, soluble polysulphide and organic compound reaction products, (P.), B., 370. Plastic materials, (P.), B., 775.
- Patrick, *W. A.*, and Land, *W. E.*, influence of capillarity on m.p. of iodine, A., 294.
- Patrick, *W. A.*, jun., refining of light oils and distillates thereof obtained from distillation or hydrogenation of coal or coal tars and products produced thereby, (P.), B., 1126.
- Patrick, *W. L.* See Moore, *B.*
- Patry, *M.*, allotelluric acid, A., 834. Nomenclature of the telluric acids, A., 1090.
See also Pascal, *P.*
- Patscheke, *G.*, and Tanne, *C.*, solubility of alkali chlorides in liquid ammonia and their influence on each other's solubility, A., 1314.
See also Terres, *E.*
- Patten, *E. L.* See Fairchild, *D. H.*
- Patterson, *A. L.*, tabulated data for the seventeen plane groups, A., 1193. Direct method for determination of the components of interatomic distances in crystals, A., 1193.
- Patterson, *C. L.*, yeasted milk, (P.), B., 380.
- Patterson, *F. S.* See Freed, *C. J.*
- Patterson, *G. D.* See Du Pont de Nemours & Co., *E. I.*
- Patterson, *H. A.*, catalytic production of acetic acid, (P.), B., 665.
- Patterson, *J.*, determination of fructose in blood, A., 1001.
- Patterson, *J. A.*, jun., and Day, *A. R.*, catalytic oxidation of ethyl alcohol, B., 584.
- Patterson, *J. B. E.*, comparison of feeding values of grass ensiled by the A.I.V. process and a ration containing mangolds and hay, B., 781.
- Patterson, *N. A.* See Kelsall, *A.*
- Patterson, *P. A.*, and McAleer Manufg. Co., abrading and polishing composition, (P.), B., 407.
- Patterson, *T. S.*, and Holmes, *G. M.*, met-acetaldehyde: its preparation and influence on rotation of ethyl tartrate, A., 1107.
- Patterson, *W. I.*, and Adams, *R.*, stereochemistry of diphenyls. XXXIX. Synthesis of active 2:6-dibromo-3:3'-diamino-4:4'-ditolyl, A., 742.
and Du Vigneaud, *V.*, synthesis of homocystine, A., 1486.
See also Du Vigneaud, *V.*
- Patterson, *W. S.*, and Culbert, *R. C. A.*, influence of certain organic hydroxy-compounds on corrosion of iron in oxygenated salt solution, B., 1048.
- Pattock, *K.* See Scholder, *R.*
- Patton, *A. R.*, determination of glycine in proteins, A., 370.
- Patton, *B. J.*, refractory material, (P.), B., 1044.
- Patton, *W. E.*, alterations in mineral constituents of anterior horn cells in experimental poliomyelitis, A., 888.
- Patwardhan, *V. A.* See Ayyar, *P. R.*
- Patzelt, *G.* See Bernhauer, *K.*
- Patzl, *H.* See Lippay, *F.*
- Patzsch, *H.* See Berge, *R.*
- Patzug, *V.* See Karpatschev, *S.*
- Paul, *A. D.* See Newton, *J. D.*
- Paul, *A. M.*, raisin oil by-product, B., 427.
- Paul, *B.*, and Végh, *P.*, ingestion of excess sodium chloride in allergic diseases, A., 1400.
- Paul, *H.* See Hilditch, *T. P.*
- Paul, *Hans*, dewatering of bituminous coal slurries on suction filter plants, B., 1078.
- Paul, *Henry*, calcium distribution in chicken blood, A., 374.
- Paul, *M.* See Hugel, *G.*
- Paul, *P. T.* See Coleman, *G. H.*
- Paul, *R.*, hydropyran nucleus. II. Bromoderivatives of tetrahydropyran. III. Preparation of 2-alkyltetrahydropyrans; α : α -dibromides and diols, A., 220, 626. Preparation of α -alkylfurans, A., 866. Stability of the hydrofuran ring. III. Mechanism of rupture of the ring in tetrahydrofurfuryl derivatives; preparation of Δ^8 -penten- α -ol, A., 866. Oxidation and reduction in catalytic dehydration of furylalkylcarbinols, A., 867.
See also Blanchard, *Louis*.
- Paul, *W. D.* See Clark, *B. B.*
- Paul, *W. H.*, and Gleason, *G. W.*, exhaust-gas analysis, B., 437.
- Paulant, *F.* See Leulier, *A.*
- Pauli, *W.*, relations between electrochemical behaviour and structure of colloids, A., 298.
and Hofmann, *L.*, relations between colloidal and constitutive changes of proteins. III. Casein and edestin, A., 823.
- Pauli, *W.*, and Kölbl, *W.*, relations between colloidal and constitutive changes of proteins. II. Heat-denaturation of albumin outside the isoelectric region, A., 822.
and Neurath, *H.*, reversal of charge of highly purified ferric oxide sols by multivalent electrolytes, A., 444.
- Russer, *E.*, and Brunner, *E.*, formation and properties of acidoid gold sols with charging mixed complexes, A., 1073.
- and Schild, *T.*, formation of platinum sols. I., A., 1202.
- and Weissbrod, *J.*, relations between colloid and constitutive changes of proteins. IV. Heat-coagulation and colloid structure of albumins, A., 1460.
- Paulie, *E. E.*, microflora of Kazakstan sands (central Asia), B., 115.
- Pauling, *L.*, oxygen equilibrium of haemoglobin and its structural interpretation, A., 878.
- and Beach, *J. Y.*, van der Waals interaction of hydrogen atoms, A., 804.
- and Brockway, *L. O.*, interpretation of electron-diffraction photographs of gas molecules, with results for benzene and carbon tetrachloride, A., 153.
- Klug, *H. P.*, and Winchell, *A. N.*, crystal structure of swedenborgite, NaBe₂SbO₇, A., 1308.
- and Wheland, *G. W.*, theory of aromatic free radicals, A., 810.
See also Sutton, *L. E.*
- Pauls, *J. T.* See Stanton, *T. E.*
- Paulsen, *E.* See Reichert, *F.*
- Paulsen, *O.*, Raman effect. XI. Raman spectra of *cis-trans* isomerides, A., 429.
- Paulson, *P. A.*, paper pulp, (P.), B., 624.
- Paulus, *M. G.* See Standard Oil Co.
- Paulus, *R.* See Stackelberg, *M. von*.
- Paulus, *W.* See Fischer, *R.*
- Pauly, *R. W.* See Hedvall, *J. A.*
- Pavelka, *F.*, chemical and physical structure of the protective layer on aluminium, A., 592. Red ammonium chloride, A., 945.
- and Molterer, *H.*, spectral analysis, A., 315.
- and Morth, *H.*, quantitative rapid micro-analysis of pure aluminium. II. Determination of silicon and phosphorus, B., 273.
- Pavinski, *P.*, exchange interaction between two nuclei, A., 569.
- Pavitt, *W. H.*, coke oven, (P.), B., 791.
- Pavlas, *P.*, hardening of filter-cloths [used for filtering first carbonated sugar juices], B., 1159.
See also Staněk, *V.*
- Pavlov, *K. F.*, and Lesochin, *I. G.*, pyrites as a source of sulphur, B., 802.
- Pavlov, *M.* See Genevois, *L.*
- Pavlov, *S.* See Smorodincev, *I. A.*
- Pavlov, *S. E.* See Krönig, *W. O.*
- Pavlov, *V.* See Kornfeld, *M.*
- Pavlova, *E.* See Rodionov, *S.*
- Pavlova, *L.* See Bachromejev, *I. R.*
- Pavlova, *S. N.*, Fergana crude oil from the Kim (Santo) deposit, B., 1029.
and Hofman, *P. S.*, Nuta (Sakhalin) crude oil, B., 1029. Ukhta crude oils, B., 1029. Baikal crude oil; Fergana crude oils from the Shorsu deposit, B., 1029.
See also Velikovski, *A. S.*
- Pavlovich, *P.*, physico-chemical basis of the preparation of leather substitutes, B., 798.

- Pavlovich, P., and Tzuirulnikov, N., impregnating cardboard counters, B., 798.
- Pavlovitsch, S., action of heat on oxides of manganese, A., 314. Amphibolites from Zlatibor (West Serbia), A., 956. Petrographical study of Zlatibor peridotites (W. Serbia), A., 956.
- Pavlovskaja, K. K. See Fortinski, B. F.
- Pavolini, L., test for sesame oil, B., 597.
- Pawek, H., Bauer, J., and Dienbauer, J., electrolytic deposition of copper-nickel-iron alloys, A., 175.
- Pawlak, W. See Långauer, D.
- Pawlek, F., rolling and recrystallisation texture in iron-nickel alloys in relation to the magnetic properties, B., 855. See also Dahl, O.
- Pawletta, A., and Wentzky and Petersheyde, D. von, milk of abnormal f.p., B., 171.
- Pawlikowski, T., and Slebodzinski, T., chemical basis of the panoptic reaction applied to the detection of adrenaline in the tissues, A., 1543.
- Pay, A., and Clements, A. R., charcoal, (P.), B., 87.
- Payen. See Patoir, A.
- Payman, W., and Woodhead, D. W., pressure wave sent out by an explosion. III. Spark photographs with permitted explosives, B., 126.
- Woodhead, D. W., and Titman, H., explosion waves and shock waves. II. Shock wave and explosion products sent out by blasting detonators, B., 479. See also Naylor, C. A.
- Payn, R. C. See Imperial Chem. Industries.
- Payne, B. H., and Stulz-Sickles Co., [manganese-nickel steel] alloys [for welding], (P.), B., 273.
- Payne, D. E. See Standard Oil Co. of Indiana.
- Payne, E. H. See Standard Oil Co. of Indiana.
- Payne, J. H., nitric acid process for recovery of cellulose from bagasse, B., 586.
- Payne, L. F. See Koenig, M. C.
- Payne, R. B. See Nat. Aniline & Chem. Co.
- Payne, R. J. M. See Haughton, J. L.
- Payne, R. W., determination of basic dyes by precipitation with phosphotungstic acid, B., 298.
- Payne, S., acetanilide poisoning, A., 779.
- Payne, W. W., acid metabolism in rheumatic children, A., 518. Phosphate and creatine metabolism in fever, A., 886. and Shrukry, H., urea clearance test in children, A., 1402. See also Schlesinger, B.
- Pazadnia, P. See Rogovin, S.
- Pázler, J., importance of growth conditions on evaluation of beet varieties, B., 326. [with Růžicka, A., Dědek, J., Vašátko, J., and Dolák, F.], comparative trials of sugar-beet seed. I. Yield of roots, sugar content, and sugar yield, B., 422.
- Pchelin, A. A., and Kharitonova, M. M., [treatment of hides with] emulsion mixtures with alkali-petroleum sludge, petroleum sulphonic acids, etc., B., 418. and Novik-Bam, E. Z., stability of fat emulsions, B., 109. and Rabkina, G. S., fat-liquoring of leather, B., 242.
- Peabody Engineering Corporation, controlling viscosity of liquids, (P.), B., 658. See also Graham, D. P.
- Peacock, D. H., benzylation of amines. IV. Rate of reaction of benzyl bromide with nitrobenzylaniline and some derivatives, A., 335. Influence of substituents on energy of activation, A., 1327. and Chowdhury, J. C., new alkaloid from bark of *Holarrhena antidysenterica*, A., 996. and Menon, B. K., inversion of α -substituted hydroxyhydrindene-acetic acids, A., 343. See also Burjorjee, H. R., Chowdhury, J. C., Menon, B. K., Nair, C. N., and Singh, A.
- Peacock, M. A., pectolite, A., 843. johannite from Joachimsthal and Colorado, A., 843. [with Montgomery, A., and Over, E., jun.], topaz from Devil's Head, Colorado, A., 956.
- Peacock, R. B. See Imperial Chem. Industries.
- Peak, D. A., and Robinson, Robert A., micro-determination of vapour density, A., 59.
- Peake, H. E. J., fermented beverages and medicinal preparations, (P.), B., 284. and Ellerman's Arracan Rice & Trading Co., extraction of [animal or vegetable] oils, (P.), B., 159.
- Peale, R., Davis, K., and Peale-Davis Co., separation of intermixed divided materials, (P.), B., 929.
- Peale-Davis Co. See Davis, K. and Peale, R.
- Pearce, A. F. See Tyndall, A. M.
- Pearce, D. W., Quirke, T. T., and Hopkins, B. S., chemical stability of terminal faces of acicular crystals, A., 1086.
- Pearce, E. S., and Railway Service & Supply Corp., mixing of oils, (P.), B., 486.
- Pearce, J. G., modern cast iron in chemical engineering, B., 358.
- Pearce, J. N., and Berhenke, L., dipole moments of substituted benzaldehydes, A., 1304. Electric moments of organic compounds, A., 1447. and Blackman, L. E., vapour pressures and activity coefficients of aqueous solutions of calcium and aluminium nitrates at 25°, A., 302. and Garwood, L. J., solubilities and activity coefficients of the three nitroanilines in aqueous solutions of typical salts at 85°, A., 159. and Hanson, A. C., adsorption of vapours of ketones and esters by activated charcoal, A., 929. and McDowell, M. L., b.p. elevation in solutions of potassium iodide in ethyl alcohol, A., 1318. and Reed, G. H., heats of adsorption of certain organic vapours on activated charcoal at 25° and 50°, A., 696. and Thomas, Margaret, effect of strong electrolytes on rate of inversion of sucrose at 25°, A., 1328.
- Pearce, T. J. P. See Travers, M. W.
- Pearl, A. H. See Natelson, S.
- Pearsall, (Miss) A. W., intensities of satellites of *K α* , A., 1184.
- Pearse, H. A., three-product flotation at Britannia; separation of copper-zinc-iron from low-grade ore, B., 191, 770.
- Pearse, R. W. B. See Gaydon, A. G., and Lunt, R. W.
- Pearson, H. See Simon, F.
- Pearson, H. P., Burrows, L. J., and Stanco, Inc., granular asphalt, [etc.], (P.), B., 180.
- Pearson, J. C., and Lehigh Portland Cement Co., cement paint, (P.), B., 456.
- Pearson, J. H. See Bigelow, J. A.
- Pearson, J. L., Nonhebel, G., and Ulander, P. H. N., removal of smoke and acid constituents from flue gases by a non-effluent water process, B., 390. See also Imperial Chem. Industries.
- Pearson, R. E. See Electrical Co., Ltd., D. & B.
- Pearson, R. W. See Sheets, O.
- Pearson, T. G., free radicals and atoms in primary photochemical processes. I. Photo-dissociation of aliphatic ketones and aldehydes, A., 48. and Purcell, R. H., free radicals and atoms in primary photo-chemical processes. II. Photo-dissociation of aliphatic aldehyde and ketones, A., 1211. Free *n*-propyl radical, A., 1221. See also Aynsley, E. E., and Emeléus, H. J.
- Pease, J. W. See Pease, W. M.
- Pease, R. N., kinetics of thermal hydrogen-chlorine reaction, A., 39. and Wheeler, A., relative rates of combination of light and deuterium with ethylene, A., 938. Reaction in ethylene-hydrogen mixtures induced by oxygen, A., 939.
- Pease, W. M., and Pease, J. W., preservation of fresh raw fruit, (P.), B., 748.
- Pease, Anthony Equipment Co. See Anthony, A. W., jun.
- Pease & Partners, Ltd., Braunholtz, W. T. K., and Robinson, R. L., preparing and putting up oleaginous disinfectants, (P.), B., 656.
- Peck, A. B. See Riddle, F. H.
- Peck, E. B. See Standard Oil Development Co.
- Peck, S. S., [sugar] massecuite treating apparatus, (P.), B., 970.
- Peckelhoff, P. P. See Adickes, F.
- Peden, O. D. See Fletcher, R. T.
- Pedersen, C. J., determination of Gardinol and Brilliant Aviol, B., 449.
- Pedersen, K. J., dissociation constants of acetoacetic, glycolic, and acetic acids in solutions of sodium chloride, A., 166. Complex formation between aniline and picrate ion; solubility measurements, A., 166. Velocity of bromination of acetoacetic acid, A., 174.
- Pedersen, K. O., sedimentation equilibrium measurements with low-molecular substances in the ultracentrifuge, A., 444. See also Heidelberger, M.
- Pedersen-Bjergaard, K., and Konstantin-Hansen, B., oestrin and corpus luteum hormones, A., 413. See also Kemp, T.
- Pedlow, J. W. See Schmidt, Erich.
- Pedolin, A. See Reichstein, T.
- Peebles, D. D., treatment of non-gaseous materials, (P.), B., 385, 1026. Food product and method of manufacture, (P.), B., 827.
- Peebles, J., and Glenfield & Kennedy, Ltd., apparatus for screening water and other fluids, (P.), B., 788.
- Peech, M., and Bradfield, R., effect of lime and neutral calcium salts on solubility of soil potassium, B., 602.
- Peek, R. J. See Brit. Celanese.

- Pegram, G. B. See Dunning, J. R.
- Pehrson, J. M., and Pehrson, R. V., drying of materials susceptible to overheating, (P.), B., 386. Heat treatment of materials by means of gases in rotary retorts or drums, (P.), B., 530.
- Pehrson, R. V. See Pehrson, J. M.
- Peierls, R., statistical error in counting experiments, A., 912. Fundamental paradox of the quantum theory, A., 1298.
- See also Bethe, H. A.
- Pein, H. von. See Schade, H.
- Peintal Soc. Anon., anticorrosive films on aluminium and its alloys, (P.), B., 956.
- Peirce, A. W., basal (standard) metabolism of the Australian merino sheep. II. Factors concerned, A., 387.
- Peirce, C. B. See Lilly, C. A.
- Peirier, J. C., dyestuffs for injection purposes, B., 523.
- Peisker, H. See Ulich, H.
- Peika, F. See Sauerwald, F.
- Pell-Walpole, W. T. See Hanson, D.
- Pellarano, J. C., and Schere, S., thyroxine in infancy, A., 1010.
- Pellatt, D. L. See Transparent Paper, Ltd.
- Pellegrini, M., gastric and duodenal function in relation to sugar tolerance tests, A., 1016.
- Pelmar, P. See Sekla, B.
- Pelsch, A. D., silver absorber for gaseous halogen compounds, A., 952.
- Pelt, A. J. van, jun., and De Boer, F., system mercuric chloride-mercuric bromide, A., 35.
- Peltier, S. H., agatised bodies [glass containing coloured streaks], (P.), B., 271.
- Pelton, E. L. See Dow Chem. Co.
- Peltzer, A., Peltzer, A., jun., and Merco Centrifugal Separator Co., mill-starch treatment, (P.), B., 120.
- Peltzer, A., jun. See Peltzer, A.
- Peltzer, J., simplified vacuum ester process for detection of margarine and hardened oils, B., 364.
- Pélyi, J., apparatus for determining gaseous metabolism of small animals, A., 652.
- Pelz, S., crystal photo-effect with coloured rock-salt, A., 232.
- Pelzer, H. L., and Sinclair Refining Co., cracking of hydrocarbons, (P.), B., 56.
- Pember, F. R. See Gilbert, B. E.
- Pemberton, C. E., [report on] entomology, B., 118.
- Pemberton, E. S., Card, S. T., and Craven, E. C., testing of acetone, B., 714.
- Pembroke Chemical Corporation. See Kerschbaum, F. P.
- Pénau, H., and Simonnet, H., hormones of the corpus luteum, A., 902.
- See also Stolk, D. van.
- Pence, L. H. See Bachmann, W. E.
- Pencharz, R. I. See Evans, H. M.
- Pendergast, W. L. See Heindl, R. A.
- Pendlebury, E. E., products for glazing or otherwise finishing textile materials, (P.), B., 800.
- Pendleton, R. L., tea soils of China, Formosa, and Japan, B., 1009.
- Pendse, G. P., and Dutt, S., Indian medicinal plants: *Tinospora cordifolia*, *Solanum xanthocarpum*, and *Fumaria officinalis*, A., 796. Constituents of the bark of *Nerium odoratum*, Soland, A., 1180. Seeds of *Plantago ovata* (isabgol), A., 1180.
- Penfold, A. R., physiological forms of the eucalypts, A., 654.
- Penfold, A. R., and Morrison, F. R., essential oils of *Eucalyptus micrantha* (D.C.), including a form rich in piperitone. II, B., 45. Australian tea-tree oils, B., 174.
- Ramage, G. R., and Simonsen, J. L., identity of darwinol with *d*-myrtenol, A., 350. Essential oils of the genus *Calythrix*. II. *C. tetragona* (Labillardière), var. "A," B., 573.
- See also Bradfield, A. E.
- Peng, C., determination of potassium [in soils and fertilisers], B., 966.
- Peng, S. L. See Wilson, E. O.
- Peng-Chu, W., pig's blood as human food in China, A., 890.
- Penman, H. L., effect of temperature on supersonic dispersion in gases, A., 1062.
- Pennaneach, J. See Le Chuiton, F.
- Penner, A. J. See Koslovski, M. T.
- Penners, K. See Pieters, H. A. J.
- Pennney, W. G., bond energies and valency angles in simple carbon compounds, A., 810.
- See also Sutherland, G. B. B. M.
- Penning, P. M., starting potential of glow discharge in neon-argon mixtures between large parallel plates. II. Ionisation and excitation by electrons and metastable atoms, A., 1.
- and Addink, C. C. J., starting potential of glow discharge in neon-argon mixtures between large parallel plates. I. Results, A., 1.
- and Kruithof, A. A., amplification of photo-currents through emission of secondary electrons, A., 1217.
- and Moubis, J., discontinuities in characteristics of photo-cells, A., 465.
- Pennington, W. A., and Jennings, W. H., determination of graphitisation rates in white cast iron, B., 151.
- Pennsylvania Crusher Co. See Buchanan, G.
- Pennsylvania Salt Manufacturing Co., sodium aluminate, (P.), B., 672.
- See also Bender, H.
- Penston, N. L., return of mineral elements to the soil by plants, B., 967.
- Pentegov, A. P., Nikolskaja, Y. P., and Anzelevich, V. A., extraction of aluminium oxide from clay with ammonium sulphate, B., 20. Carbon-containing shale of Khakassia as a raw material for alumina, B., 20.
- Pentegov, B. P., Artem coals from the Far Eastern district, B., 436.
- Pentzer, W. T., Asbury, C. E., and Hamner, K. C., effect of sulphur dioxide fumigation on respiration of Emperor grapes, B., 423.
- Penz, H. See Steinkopf, W.
- Peoples, J. A., jun. See Slack, F. G.
- Peoples, S. A., and Phatak, N. M., spectroscopic determination of gum acacia in blood; rate of disappearance in normal dogs, A., 1000.
- Pepe, M., and Vacca, C., action of prolan and folliculin on the testicle, A., 791.
- Peper, J. P., damage to cotton fabrics caused by treatment with magnesium sulphate, B., 59.
- See also Smit, R.
- Pepper, B. B. See Driggers, B. F.
- Pepper, D. S., urinary excretion of "S-substance" [soluble specific polysaccharide] in lobar pneumonia, A., 1402.
- Pepper, W. P. See Baly, E. C. C.
- Peraus, A., changes in distribution of fats in cells of the corpus luteum of pseudogestation in rabbits, A., 1011.
- Peraus, A. See also Skowron, S.
- Percival, (Mrs.) E. E., and Percival, E. G. V., methylation of glucosphenyl-oxazone and its formulation as a derivative of fructopyranose, A., 1484.
- Percival, E. G. V., additive compounds of the carbohydrates. II. Potassium hydroxide-sucrose, A., 964.
- See also Munro, J., and Percival, (Mrs.) E. E.
- Percival, W. C., biology of *Fomes pini* (Thone), Lloyd (*Trametes pini* [Thone]. Fries), A., 1432.
- Perdok, W. G. See Klasens, H. A.
- Perdue Research Foundation. See Hass, H. B.
- Peregudov, V. N., combined effect of several factors [on plant growth]; Mitscherlich's theory and Rippell's law, B., 116.
- Pereira, F. B., and Da Cruz, A., Michaelis constant for fumarase, A., 249.
- See also Jacobsohn, K. P.
- Perelis, W. J. See Universal Oil Products Co.
- Perelman, S. S., Korkhov, V. A., and Soloveva, V. A., economics of production of ammonium sulphate from phosphogypsum, B., 671.
- and Rozler, V., conversion of gypsum by aqueous ammonium sulphate, B., 493.
- Peretti, G., electrodialysis of artificial systems of calcium chloride and alkali citrates, A., 698. Electrophoresis of artificial calcium-carbamate acid complexes, A., 698. Excretion of exogenous fats through the intestinal mucosa, A., 1152. Iodoacetic acid and glycosuria, A., 1158.
- Perez, A. See Marañón, J.
- Perez, J. J. See Basset, J.
- Perez, M., resistance of sarcomatous rats to insulin, A., 1269.
- Pergamentowna, F. See Kraszewski, W.
- Periani, P., behaviour of cements in sea- and fresh water, B., 631.
- Perin, S. See Berger, R.
- Perturin, manuring of soils in dry climates, X. U.S.S.R., B., 515.
- Perkin, H. J., Brown, B. R., and Lang, J., blood-iodine content of normal and thyrotoxic individuals; iodine-tolerance test, A., 231.
- Perkins, G. A. See Carbide & Carbon Chem. Corp.
- Perkins, G. W., and Edwards, M. W., 2,4-dinitrophenylhydrazine as a quantitative reagent for carbonyl compounds. II. Benzophenone and acetone, A., 998.
- and Quimba, G. P., preparation of tetraiodophthalic anhydride, A., 343.
- See also Nussle, W., jun.
- Perkins, I. M., and Atlantic Refining Co., filtration, (P.), B., 834.
- Perkins, M. A. See Du Pont de Nemours & Co., E. I.
- Perkins, M. F., and Amer. Smelting & Refining Co., lead carbonate, (P.), B., 270.
- Perkins, P. R., dryer, (P.), B., 83.
- Perkins, R. P. See Dow Chem. Co.
- Perkins Glue Co., glue bases and glues [from starch], (P.), B., 864.
- See also Pierson, G. G.
- Perla, D. See Sandberg, M.
- Perla, J. See Zunz, E.
- Perlück, A. See Clusius, K.
- Perlitiz, H., structure of the intermetallic compound Au_2Pb , A., 920.

- Perlman, *J. L.*, distribution of phospholipins in cream, *B.*, 571.
- Perlmann, *G.* See Raudnitz, *H.*
- Perminov, *P.* See Alexeev, *D. V.*
- Permjakov, *V. M.*, and Tamarkina, *M. L.*, materials chemically resistant to aluminate solutions stored under conditions of production of alumina by the alkali method, *B.*, 993.
- Permutit, *Co.*, treatment of glauconite, (*P.*), *B.*, 948.
See also McElroy, *K. P.*, and Vaughan, *W.*
- Perna, *P.*, benzol from illuminating gas produced in continuous retorts, *B.*, 1081.
- Perold, *I. S.* See Du Toit, *M. S.*
- Péronnet, *M.*, experimental intoxication by benzene vapour; concentration of the poison in the blood and rate of disappearance, *A.*, 895.
- Peroutka, *F.* See Kubelka, *V.*
- Perrakis, *N.*, Kapatos, *L.*, and Kyriakidis, *P.*, paramagnetism of metallic rhodium, *A.*, 19.
- Perrault, *M.* See Loeper, *M.*
- Perret, *A.*, and Perrot, *R.*, reactivity of sodium amide, *A.*, 49. Action of halogen compounds on alkali iodide solutions, *A.*, 179. Cryoscopy of mixtures of nitrogen peroxide and bromine, *A.*, 934.
- Perret, *H.* See Dœuvre, *J.*
- Perrett, *J. G.*, water softeners of the zeolite type, (*P.*), *B.*, 658.
- Perreu, *J.*, calorimetry of salt solutions (system sodium sulphate-magnesium sulphate-water), *A.*, 303. Tonometry of saline solutions, *A.*, 579, 825.
- Perrichet, *J.* See Lecomte, *J.*, and Mathieu, *J. P.*
- Perrier, *A.*, can the magnetic coupling of spontaneous magnetisation be observed experimentally? *A.*, 435. Origin of changes of susceptibility with the frequency, *A.*, 435. Mechanical requirements and complementary anisotropy of ferromagnetic materials, *A.*, 1058.
- Perrin, *F.*, Brownian movement of an ellipsoid. I. Dielectric dispersion for ellipsoidal molecules, *A.*, 15. Mechanism of capture of slow neutrons by light nuclei, *A.*, 1049.
and Elsassner, *W. M.*, selective capture of slow neutrons by certain nuclei, *A.*, 426.
- Perrin, *M. W.* See Gibson, *R. O.*
- Perrin, *R.*, generative metamorphism of folds, *A.*, 1102.
- Perroncito, *G.*, action of hydrogen peroxide on 1-phenyl-3-methyl-5-pyrazolone, *A.*, 1380.
See also Crippa, *G. B.*
- Perrot, *L.* See Morel, *A.*
- Perrot, *R.*, action of nitrosyl chloride on salts of silver, *A.*, 1212.
See also Perret, *A.*
- Perrotte, *R.*, synthesis of ricinic (λ -keto-stearic) acid, *A.*, 474.
- Perrottet, *E.* See Briner, *E.*, Mirimanoff, *A.*, and Suz, *B.*
- Perrottet, (*Mlle.*) *S.* See Canals, *E.*, and Chanoz, *M.*
- Perry, *C. B.*, rheumatic heart disease and vitamin-C, *A.*, 1287.
- Perry, *E.*, putty plastics. II., *B.*, 102.
- Perry, *J. A.*, Fulweiler, *W. H.*, and United Gas Improvement Co., combustible gas, (*P.*), *B.*, 134.
and United Gas Improvement Co., use of heavy oil in manufacture of carburetted water-gas, (*P.*), *B.*, 134.
- Perry, *J. A.*, and United Gas Improvement Co., manufacture of carburetted water-gas by the use of high-carbon and low-carbon oil, (*P.*), *B.*, 485. Re-forming of oil gas, (*P.*), *B.*, 757. Mixed oil gas and water-gas, (*P.*), *B.*, 757.
- Perry, *J. H.*, and Davis, *D. S.*, charts for specific volumes of mineral acids, *B.*, 542.
- Perry, *R. S.*, and Paper Makers Chem. Corp., aluminium sulphate, (*P.*), *B.*, 270.
- Perryman, *P. W.* See Selous, *C. F.*
- Perschke, *V. K.*, influence of metallic impurities on corrosion of lead in sulphuric acid production, *B.*, 20.
- Persova, *E. M.*, synthesis of mentholyglycuronic acid in arsenic poisoning, *A.*, 1533.
See also Palladin, *A. V.*
- Persson, *O.* See Hedvall, *J. A.*
- Pertierra, *J. M.*, colloidal solution and hydrogenation of lignite, *B.*, 340.
- Perucca, *E.*, conductivity of thin metal films and surface conductivity of metals, *A.*, 20.
- Pervozvanski, *V.*, and Tschelzova, *Y.*, fermentation of cellulose, *A.*, 125.
- Pesce, *B.*, density and refractive index of benzene at varying temperatures; ("allotropy" of benzene), *A.*, 1056. Molecular volumes of electrolytes in concentrated solutions, *A.*, 1066.
- Peschke, *W.* See Kindler, *K.*
- Pesez, *M.*, new reaction of tartaric acid, *A.*, 961. Detection of citric acid, *A.*, 1259. Specific reaction for yohimbine, *A.*, 1260. Colour reaction for chloral and identification of chloral syrup, *B.*, 828.
- Peskett, *G. L.*, effect of salts on cell permeability as shown by studies of milk secretion, *A.*, 106. Determination of blood-urea, *A.*, 1393.
See also Folley, *S. J.*
- Peski, *A. J.*, van, Lorang, *H. F. J.*, and Bataafsche Petroleum Maats., catalytic dehydrogenation of alcohols, (*P.*), *B.*, 182.
See also Shell Development Co.
- Peskov, *N.*, and Preis, *E.*, reversible opalescence changes in gum sols, *A.*, 164.
and Zürup, *N.*, existence of different forms of gelatin, *A.*, 702.
- Pessel, *L.*, heat treatment of light alloys [duralumin], (*P.*), *B.*, 274.
- Pessina, *A. G.* See Sadikov, *V. S.*
- Pestalozza, *U.*, and Soc. Ital. Pirelli, rubber compositions from latex and similar aqueous rubber dispersions, (*P.*), *B.*, 600. Cellular and porous rubber [from latex], (*P.*), *B.*, 817.
See also Soc. Ital. Pirelli.
- Pestemer, *M.*, ultra-violet absorption of binary liquid mixtures. V. System acetone-hexane, *A.*, 145.
and Bernstein, (*Frl.*) *P.*, influence of addition of calcium chloride on absorption of solutions of Cu^+ , Cu^{++} , Fe^{++} , Ru^{+++} , and Sm^{+++} ; chromophore theory, *A.*, 1051.
and Litschauer, *B.*, ultra-violet absorption of the thiocarbimide and thiocyanate groups, *A.*, 428. Ultra-violet absorption of binary liquid mixtures. VIII. System acetone-benzene, *A.*, 428.
and Schmidt, *Gerhard*, ultra-violet absorption of binary liquid mixtures. VI. System ethyl thiocyanate-hexane, *A.*, 428.
- Pestemer, *M.*, and Wiligut, *L.*, ultra-violet absorption of aromatic hydrocarbons. III. Constitution of tetrahydrodiphenyl, *A.*, 1299.
- Pestrecov, *K.* See Corey, *R. B.*
- Peter, *A.*, preliminary tests for detection of small amounts of hardened oils, tallows, and fats of the palm oil group in lard, *B.*, 364.
- Peter, *C. J.* See Kurien, *P. N.*
- Peter, *J.* See Grossfeld, *J.*
- Peterkin, *A. G.*, jun., and Atlantic Refining Co., fractional distillation [of hydrocarbons], (*P.*), *B.*, 217.
- Peters. See Liese.
- Peters, *F. P.*, electrical resistance alloys: why nickel-chromium so successfully serves as heating-element material, *B.*, 1049.
- Peters, *H. C.*, Rea, *G. E.*, and Visscher, *M. B.*, influence of calcium ions on energy metabolism of the mammalian heart, *A.*, 1528.
- Peters, *K.*, and Neumann, *L.*, formation of liquid hydrocarbons from acetylene. IV. Catalytic hydrogenation and polymerisation of acetylene with complex catalysts, *B.*, 394.
- Peters, *O.* See Hilpert, *R. S.*
- Peters, *R. A.*, vitamin-B₁ and blue fluorescent compounds, *A.*, 415.
Rydin, *H.*, and Thompson, *R. H. S.*, relation of pyruvic acid in brain to certain tissue poisons, *A.*, 262. Brain respiration, a chain of reactions as revealed by experiments on catalotulin effect, *A.*, 262.
and Thompson, *R. H. S.*, pyruvic acid and the avitaminotic brain, *A.*, 130.
See also Kinnersley, *H. W.*
- Peters-Mayr, *T.* See Grassmann, *W.*
- Peters Cartridge Co. See Bowyer, *W. W.*
- Petersen, *S.* See Winkler, *S.*
- Petersen, *S. R.* See Helferich, *B.*
- Petersilie, *H.*, cholesteryl esters as a mechanism of fat metabolism, *A.*, 1015.
- Peterson, *B. H.* See Dudycha, *J. A.*
- Peterson, *C. A.*, guarded radiation plate method for determination of thermal conductivity of refractories at elevated temperatures, *B.*, 546.
- Peterson, *Clarence E.* See Peterson, *O. L.*
- Peterson, *Clifford E.*, testing of non-fibrous raw materials [for papermaking], *B.*, 587.
- Peterson, *E. A.*, 3:5-diacetoxymercuri-4-nitroguaiacol; [bactericide], (*P.*), *B.*, 782.
- Peterson, *E. G.* See Hercules Powder Co.
- Peterson, *F. C.*, Maughan, *M.*, and Wise, *L. E.*, wood. VI. Water-soluble polysaccharide from European larch, *A.*, 478.
- Peterson, *H. L.* See Peterson, *O. L.*
- Peterson, *O. L.*, Peterson, *H. L.*, Peterson, *Clarence E.*, and Delaney Chem. Co., solution for treating [pickling] metal surfaces, (*P.*), *B.*, 638. Composition [pickle] for treating [ferrous] metal, (*P.*), *B.*, 680. Treatment of metal surfaces and solution therefor, (*P.*), *B.*, 680.
- Peterson, *P. D.* See Koppers Co. of Delaware.
- Peterson, *R. D.* See Keith, *N. M.*
- Peterson, *R. G.*, and Osgood, *G. H.*, vegetable protein glue, (*P.*), *B.*, 864.
- Peterson, *W. H.*, Bohstedt, *G.*, Bird, *H. R.*, and Beeson, *W. M.*, preparation and nutritive value of A.I.V. silage for dairy cows, *B.*, 476.

- Petrov, W. H., McClung, L. S., and Bird, H. R.**, bacteriological and chemical aspects of A.I.V. silage, B., 521. Bacteriological and chemical properties of A.I.V. silage, B., 971. See also **Conner, H. A., Knechtges, O. J., Kroeker, E. H., Langlykke, A. F., Prill, E. A., and Tatum, E. L.**
- Petherbridge, F. R., and Thomas, I.**, control of flea-beetles in seed beds, B., 282.
- Petiau, G.**, equation of the photon, A., 912.
- Petit, P.**, susceptibility of beer to cold, B., 76.
- Petitpas**, resistant steels in the wood industry, B., 996.
- Peikovitch, S.** See **Stanoyévitch, L.**
- Petit, H., and Comp. Franç. des Conduites d'Eau**, [aluminium-zinc] alloy and its applications, (P.), B., 236.
- Petrányi, G., and Blazsó, A.**, variation of protein content of red corpuscles after intake of food, A., 999.
- Petre, A. W.**, activity of tobacco mosaic virus preparations, A., 798.
- Petree & Dorr Engineers, Inc.** See **Gouner, L. E.**
- Petrenko-Kritschenko, P.**, [law of periodicity and the conjugated system], A., 745.
- Petri, H.** See **Wittig, G.**
- Petrick, A. J.** See **Marais, J. K.**
- Petrie, A. H. K.**, drift of the potassium and calcium content with age in plants, A., 265.
- Petrie, D. P. R.**, X-ray wave-lengths by the plane-grating vacuum spectrograph, and structure of the K line of carbon, A., 1046.
- Petrie, P. S.** See **Dow Chem. Co.**
- Petrík, F.**, production of gases by the electric arc or hot filament, B., 660.
- Petrof, A. D.**, hydrogenation of topped crude and of petroleum cracked residues, primary shale and coal tars, asphalts, and phenols, B., 790.
- Petroleum Conversion Corporation.** See **Beardsley, E. W., Blanckenburg, E., and Evans, D. M.**
- Petroleum Engineers, Inc.** See **Raigorodsky, P. M., and Whitaker, H.**
- Petroleum Rectifying Co. of California.** See **Eddy, H. C., Garrison, M. E., Hanson, C. B., Loenen, W. F. van, and Roberts, C. M. H.**
- Petrotschenko, A. P.** See **Sharkov, V. I.**
- Petrov, A. A.**, compounds of oxyhalides with unsaturated compounds. I. II. Reaction of nitrogen iodide with acids and alcohols in presence of olefines, A., 603, 729. See also **Lichoscherstov, M. V.**
- Petrov, A. D., and Antzus, L. I.**, low-temperature hydrogenation and polymerisation of acetylene in presence of nickel catalysts, A., 325. and **Bogoslovskaja, T. N.**, chemistry of voltol oil formation, B., 292.
- Meschtscherjakov, A. P., and Andreev, D. N.**, catalytic isomerisation of n-heptane, n-octane, and Δ^α-hexene, A., 324.
- and Pozhiltzeva, E. A.**, hydrogenation of pitch and heavy distillates from primary brown-coal tars to Diesel fuel, B., 391.
- Petrov, A. P.**, two-stage pulping of straw, B., 221.
- Petrov, G. S., and Krilovskaja, R. S.**, condensation of phenol with hexamethylenetetramine for production of technical resins, B., 1152.
- Petrov, G. S., and Rishina, R. G.**, condensation of phenol and cresol with formaldehyde in presence of barium hydroxide, B., 1152.
- Petrov, I., and Pasinski, A.**, *p_H* measurements in gelatin solutions, A., 1075.
- Petrova, L. N., and Nikolaev, N.**, determination of anthranilic acid, B., 1036.
- Petrova, M. S.** See **Lurie, S. N.**
- Petrovano, G.**, oxidation-reduction phenomenon of methylene-blue in transmissible lysis, A., 900.
- Petrů, F., and Hadáček, J.**, paraffin hydrocarbon in oil of birch buds, A., 672. See also **Raudnitz, H.**
- Petrunkina, A.**, nitrogen, calcium, magnesium, phosphorus, and iron balances in children of 7-8 years, A., 114.
- Petsch, W.** See **Decker, H., and Gleu, K.**
- Petscherkina, Z. A.** See **Saposhnikova, N. V.**
- Pett, L. B.**, flavin transformation by bacteria, A., 255. Laetoflavin in microorganisms, A., 663. Changes in the flavin content of yeast, A., 1165. Distribution of enzymes in dormant and germinating wheat seeds. I. Dipeptidase and protease. II. Lipase, A., 1179.
- Pettenati, R.**, fused cement, B., 150.
- Pettersson, H., and Schintlmeister, J.**, atomic fragment of short range from heavy inert gases, A., 1442.
- Pettet, A. E. J.** See **Morgan, G. T.**
- Pettibone, W. W.**, pulveriser, (P.), B., 531.
- Pettinger, A. H.**, aluminium [salts] in textile technology, B., 19. Significance of metallic constituents in textile fabrics, B., 670.
- Pétursson, M.** See **Euler, H. von.**
- Pevzner, E. B.** See **Bergman, A. G.**
- Pew, A. E., jun., Angstadt, H. F., and Sun Oil Co.**, treatment of containers for reception of transformer oil, (P.), B., 555. **Tarbox, L. A., and Sun Oil Co.**, used filtering material for revivification, (P.), B., 930.
- Pew, J. C.** See **Curran, C. E., and Schafer, E. R.**
- Pexton, S.**, assessing gas-making results, B., 389.
- Psychés, I.**, Raman spectra of tartaric acid and tartrates in aqueous solution, A., 146. Dry rectifiers, B., 193. See also **Darmois, E.**
- Peyer, E.** See **Ruzicka, L., and Stoll, A.**
- Peyer, W., and Vollmer, H.**, *Leonurus cardiaca*, A., 551.
- Peyronel, G.** See **Levi, G. R.**
- Peyros, E.** See **Chrzasczcz, T.**
- Peyrot, See Boutaric, A.**
- Peyrot, E.**, principal colouring matters in white wines, B., 169. Effect [on metals] of the acidity of olive oils used as lubricants, B., 813.
- Peyrot, P.** See **Canals, E.**
- Peytral, (Mlle.) E.** See **Muller, J. A.**
- Pezzangora, F.**, non-protein-nitrogen content of serum and elimination of glycine during experimental tuberculosis, A., 1011. Effect of the tuberculin reaction on metabolism of residual nitrogen, and curve of elimination of glycine in normal, tuberculous, or BCG-inoculated rabbits, A., 1011. Metabolism of residual nitrogen and curves of elimination of glycine in rabbits inoculated with BCG, A., 1170. See also **Ninni, C.**
- Pezzoni, O.**, air agitators [punkahs], (P.), B., 611.
- Pfahler, K.** See **Karrer, P.**
- Pfaff, C.**, influence of manuring on wheat quality, B., 325. See also **Plützer, G.**
- Pfaff, G. C., and Oberphos Co.**, apparatus for producing phosphatic fertilisers, (P.), B., 919.
- Pfaff, W.** See **Meyer, Julius.**
- Pfaffenberger, J.** See **Dahl, O.**
- Pfanhauser, J.** See **Kling, K.**
- Pfankuch, H.**, enzymic reduction of dehydroascorbic acid, A., 263. Decomposition in potatoes. III. Ascorbic acid, glutathione, and sugar, A., 1181. and **Lindau, G.**, diseases of potatoes. II., A., 1043.
- Pfannenstiel, A.** See **Spengler, O.**
- Pfannkuch, W.** See **Gen. Electric Co.**
- Pfarr, B.** See **Wever, F.**
- Pfau, A. S., Pictet, J., Plattner, P., and Susz, B.**, volatile vegetable substances. III. Constitution and synthesis of carlina oxide, A., 1128.
- Pfaudler Co.**, pasteurising, deodorising, or similarly treating milk or similar liquids, (P.), B., 44. Liquid-agitating means, (P.), B., 930. See also **Jacobsen, J. N.**
- Pfeffer, P., and Hellmers, J. H.**, weathering of basalt in the Westerwald, B., 197. See also **Paackelmann, W.**
- Pfeiffer.** See **Thomann, J.**
- Pfeiffer, G.**, use of slaughterhouse blood for animal feeding, B., 522.
- Pfeiffer, H. (Erlangen).** See **Kroepelin, H.**
- Pfeiffer, H. (Nürnberg).** See **Eble, K.**
- Pfeiffer, Hans.**, capacity of isolated plant protoplasts to be drawn into threads, A., 419.
- Pfeiffer, J.** See **Terres, E.**
- Pfeiffer, J. P.**, weathering of bituminous coatings, B., 160, 366.
- Pfeiffer, P.**, organic molecular compounds, A., 469. and **De Waal, H. L.**, autoxidation phenomena in the indeno series, A., 1369. and **Schneider, K.**, betaines, A., 368. **Schwenzer, K., and Kumet, K.**, isomerism of halochromic compounds. III., A., 1124.
- Pfäffner, J. J.** See **Swingle, W. W., and Vars, H. M.**
- Pfister, H., and Wiest, P.**, influence of nickel on solubility and separation in the system silver-copper, A., 23. See also **Glocker, R.**
- Pfizer & Co., C.** See **Pasternack, R.**
- Pflesser, G.**, nitric oxide and toxicity of nitrous gases, A., 1534.
- Pflugbeil, W.**, circulatory stirrer, A., 840.
- Pfotzer, G.** See **Regener, E.**
- Plützer, G., and Pfaff, C.**, contents of carotene and vitamin-C in vegetables and feeding-stuffs, B., 1061.
- Phansalker, G. R.** See **Joshi, S. S.**
- Pharma Chemical Corporation.** See **Markush, E. A.**
- Phatak, N. M.** See **Peoples, S. A.**
- Phaup, A. E.**, patina of the stone implements found near the Victoria Falls, B., 456.
- Phelps, D.** See **Campbell, M., and Wolfe, J. M.**
- Phelps, E. L.** See **Chinn, M.**
- Phelps, H. J.**, response of isolated uterus of guinea-pig to histamine, A., 780.

- Phelps, S. M., and Ceramic Products Co., [ceramic] article, (P.), B., 805.
- Philbert, F., apparatus for treatment of liquids, (P.), B., 4.
- Philadelphia Drying Machinery Co. See Allsop, T., and Galsion, H. L.
- Philadelphia Quartz Co., rapid test for silica in hydrogen peroxide solutions, B., 1043.
- See also Morey, G. W.
- Philbrick, F. A., association of phenol in different solvents, A., 166.
- Philipp, C., and Chem. Fabr. von Heyden A.-G., solubilisation of chlorocarvacrol derivatives, (P.), B., 396.
- Philipp, F. See Helferich, B.
- Philipp, H., structure of tooth-tartar (calculus dentalis supragingivalis), A., 1004.
- Philipp, K. See Erbacher, O.
- Philippe, M. See Páid, Mladen.
- Philippi, E., and Loberig, J., separation of formaldehyde from hexamethylene-tetramine at different p_H and constant temperature, A., 962.
- Moser, Hans, and Moser, Heimo, new method in the penthiophen (thiopyran) group, A., 1377.
- Philippi, F. See Heiduschka, A.
- Philippi, G. M. See Gorter, E.
- Philippoff, W., dynamic investigations of colloidal systems. I. Mechanical properties of solutions of organic compounds of high mol. wt. II. Determination of dynamic viscosity of cellite solutions and derivation of a dispersion formula, A., 31. Theory of structure viscosity. I., A., 692.
- See also Hess, K.
- Philippot, E., sensitising action of cocaine to adrenaline in relation to different constitutional elements of its formula, A., 528.
- Philippot, L., determination of cobalt by means of nitroso- β -naphthol, A., 721.
- Philippova, L. A. See Smorodincev, I. A.
- Philippova, V. N. See Prasolov, L. I.
- Philippson, J. B., effect of slow electrons on metal surfaces, A., 1332.
- and Woodrow, J. W., absorption spectra characteristic of vitamin-A in animal and vegetable oils, A., 414.
- Phillips, A., and Brick, R. M., effect of quenching strains on lattice parameter and hardness values of high purity aluminium-copper alloys, A., 158.
- and Dunkle, H. H., directional properties in rolled and annealed low-carbon steel, B., 904.
- Phillips, A. J. See Seavey, F. R.
- Phillips, E. F. See Hildebrand, E. M.
- Phillips, F. J., and Curtis, G. M., blood-iodine. III. Reservoir burette, A., 270.
- See also Curtis, G. M.
- Phillips, H. See Balfe, M. P., and Kenyon, J.
- Phillips, J. W. C., and Mumford, S. A., dimorphism of aliphatic compounds. V. *n*-Primary alcohols and their acetates, A., 20.
- Phillips, L. H., dry powdered soap composition, (P.), B., 641.
- Phillips, Max, and Goss, M. J., lignin. IX. Lignin from barley straw, A., 214.
- Goss, M. J., Beavens, E. A., and James, L. H., microbiological decomposition of constituents of lucerne hay and its application to spontaneous heating, B., 521. Microbiological decomposition of the constituents of lucerne hay, B., 967.
- Phillips, Melba. See Oppenheimer, J. R.
- Phillips, P. H., and Hart, E. B., effect of organic dietary constituents on chronic fluorine toxicosis in the rat, A., 896.
- Hart, E. B., and Bohstedt, G., chronic toxicosis in dairy cows due to ingestion of fluorine, A., 781.
- See also Chang, C. Y., and Fargo, J. M.
- Phillips, R. L. See Young, C. H.
- Phillips, T. D., adsorption of hydrogen, A., 1315.
- Phillips, T. G., Smith, T. O., and Dearborn, R. B., effect of potassium deficiency on composition of the tomato plant, A., 553.
- See also Tottingham, W. E.
- Phillips, W. A. See Bolam, T. R.
- Phillips Chemical Co., C. H., and Walton, B., skin-cleansing creams containing magnesium hydroxide, (P.), B., 784.
- Phillips Petroleum Co. See Frey, F. E., Guyer, J. A., Schulze, W. A., and Youker, M. P.
- Phillpott, M. W., [vulcanised] rubber, (P.), B., 322.
- Philpot, J. St. L., behaviour of pepsin in the ultracentrifuge after alkaline inactivation, A., 1537.
- See also Craxford, S. R.
- Phipers, R. F. See Heilbron, I. M.
- Phipps, G. S. See Schumacher, E. E.
- Phipps, T. E., Spealman, M. L., and Cooke, T. G., glass manometer for laboratory use, A., 1219.
- See also Copley, M. J.
- Phoenix Supply Co., and Treloar, W. P., machines for disintegrating or reducing in volume solid or semi-solid materials, (P.), B., 210.
- Phosphate Recovery Corporation. See Crago, A.
- Photo-Cylinder Corporation. See Boldicker, H. C.
- Physical Chemistry Research Co., heat-treatment of oleaginous materials of vegetable or animal origin, (P.), B., 416.
- See also Michot-Dupont, G. F.
- Pi, T. H., and Band, W., longitudinal thermo-electric effect. II. Nickel in longitudinal magnetic fields, A., 1312.
- Piankov, V. A., liberation of bromine and iodine from adsorption on active charcoal, A., 930. Absorption of mercury vapour from a current of air, B., 752.
- Piatnitzki, M. P., determination of citric acid in tobacco, A., 133. Chemical constants of tobacco resins, B., 79.
- and Kashirin, S., determination of total resins in tobacco by the "dry residue" method, B., 79.
- and Kovalenko, E. I., determination of sugar in tobacco, B., 1118.
- Piatnitzki, P. P., emeralds, their occurrences and genesis, A., 1346.
- Piatscheck, H., improvement of briquette quality by the use of higher coal temperatures, B., 659.
- Piatti, L., naphthalene-free gas? B., 53.
- Piaux, L., Raman spectra of cyclopentene derivatives; synthesis of Δ^1 -benzylcyclopentene, A., 146. Application of Raman spectrography to the study of the ethylenic linking, A., 1221. Analytical applications of the Raman effect, A., 1335.
- See also Gredy, (Mlle.) B., and Miller, O.
- Piaw, C. S. See Bloch, L., and Zé, N. T.
- Piazza, J., comparison of action of heat on platinum oxide obtained chemically and in the electric discharge, A., 1058.
- Picard, R. See Alsa Soc. Anon.
- Piccard, J., and Piccard, (Mme.) J., chemical engineering in the stratosphere, B., 577.
- See also Hercules Powder Co.
- Piccard, (Mme.) J. See Piccard, J.
- Piccardi, G., detection of germanium in blende, A., 838. Atmospheres of planets, A., 1297. Spectrum of neodymium oxide in the vapour state, A., 1299. Spectrum of samarium oxide in the vapour state, A., 1299.
- Pichamuthu, C. S., conglomerates and grits of Kaldurga, Kadur district, Mysore, A., 1479.
- Pichard, G., market-gardening trials in Paris districts, B., 742. Determination of carbon in soil, B., 965. Nitrogenous manuring of *Leguminosae*, B., 1060. Determination of organic carbon in soils, B., 1108.
- Pichler, H., hydrogenation of acetylene to ethylene, B., 394. Polymerisation of acetylene at high temperatures, B., 394.
- See also Fischer, F.
- Pichot, M., viscosity anomalies, A., 290. Inhibition and swelling of clay of arable land and their relationships with solid matter carried by rivers, B., 565.
- Picciacci, L. See Passerini, M.
- Picinelli, G., blood-proteins in pregnancy, A., 518.
- Picka, R., defecation of diffusion juices, (P.), B., 920.
- Pickard, J. A., filters, (P.), B., 882.
- Pickels, E. G., ultracentrifuge, A., 1342.
- and Beams, J. W., high rotational speeds in vacuo, A., 724.
- Pickering, J. W. See Brit. Jeffrey-Diamond, Ltd.
- Pickett, A. D. See Kelsall, A.
- Pickett, O. A. See Hercules Powder Co.
- Pickett, W. F. See Zahnley, J. W.
- Pickford, P. T. H., improvement of juice from culinary and desert apples by maceration with pressed bittersweet pomace. I. and II., B., 250, 826.
- Pickles, J., and Pickles, R., coloured elastic yarns, threads, or filaments [from rubber latex], (P.), B., 279.
- See also Woodward, W. A.
- Pickles, R. See Pickles, J.
- Pickup, L. See Owen, E. A.
- Picon, M., preparation and properties of aurothiosulphates of ammonium, calcium, and quinine, A., 49, 366. Action of heat on metallic camphorcarboxylates, A., 454. Physiological action of salts of complex thio-acids containing gold, A., 656.
- Pictet, J. See Pfau, A. S.
- Pidgeon, L. M., sorption of vapours by active silica, A., 578.
- Piechulek, W., and Suszko, J., stereochemical studies. V. Optical isomerism of α -phenylsulphonylphenylacetic acids, A., 487, 974.
- Piekara, A., association of nitrobenzene in solutions and its dipole moment, A., 13. Dielectric constant of nitrobenzene and its moisture, A., 13. Magnetic birefringence and critical solution point, A., 14.
- and Mazur, J., temperature dependence of dielectric constant of nitrobenzene, A., 13.
- and Schärer, M., magnetic variation of dielectric constant of liquids, A., 13, 1192.

- Piekara, A. See also Scherer, M.
- Pien, J., pasteurisation of milk for manufacture of cheese, B., 77.
- and Baisse, J., chemical control of low-temperature pasteurisation [of milk], B., 77.
- Martin, Robert, Bergier, M., and Herschdoerfer, S., quality of lactic casein, B., 571.
- Piening, W. See Schmidt, Ernst.
- Pienkowski, S., and Starkiewicz, J., attempt to detect spontaneous emission of neutrons photographically, A., 426.
- Piepenbroek, K. See Cohen, E.
- Pieper, J., potentiometric and conductometric studies. I. Potentiometric. II. Conductometric, A., 45, 182.
- See also Böttger, W.
- Pier, M., synthetic fuels and lubricants, B., 293. Coal hydrogenation; large-scale experiments with bituminous coal, B., 340.
- See also Standard-I.G. Co.
- Piérard, J. See Brasseur, H., and Degard, C.
- Pierce, E. L. See Pierce, G. C.
- Pierce, E. W. See Soc. Chem. Ind. in Basle.
- Pierce, G. C., and Pierce, E. L., method of and material for filtration, (P.), B., 882.
- Pierce, G. R., and Denning, L. B., reclaiming or refining of petroleum oils, (P.), B., 937.
- Pierce, H. B., Nasset, E. S., and Murlin, J. R., enzyme production in transplanted loop of upper jejunum, A., 400.
- See also Feyder, S., and Nasset, E. S.
- Pierce, H. S. See Stevens, C. L.
- Pierce, I. H. See Gross, E. G.
- Pierce, J. A., application of the micro-quinhedron electrode to determination of the pH of the aqueous humour of rachitic and normal rats, A., 1524.
- and Montgomery, H., micro-quinhedron electrode: its application to the determination of the pH of glomerular urine of *Neoturus*, A., 1218.
- Pierce, J. E. See Dow Chem. Co.
- Pierce, L. See Roberts, J. W.
- Pierce, R. H. H., jun. See Austin, James B.
- Pierce, S. C., jun. See Larmour, H. M.
- Pierce, W. C., scattering of X-rays by polyatomic liquids; *n*-heptane, A., 813.
- and Grosse, A. von, M series of element 91, protoactinium, A., 677.
- Pierre, M. See Jung, L.
- Pierre, W. H. See Jacob, K. D., and Taylor, J. R., jun.
- Pierry, J. See Justianos, A.
- Piersol, R. J., influence of current density on chromium [plate] hardness, B., 413. Influence of temperature on efficiency of chromium-plating, B., 413. Influence of trivalent chromium on chromium [plate] hardness, B., 502. Influence of iron on chromium hardness, B., 554. Influence of bath concentration on chromium [plate] hardness, B., 1051.
- Pierson, C. See Dean, R. S.
- Pierson, G. G., reducing action of mercurous chloride; separation, detection, and determination of arsenic, gold, platinum, palladium, selenium, tellurium, and iodine, A., 53.
- and Perkins Glue Co., [casein] adhesive composition [for wood], B., 470.
- Pierson, H., production of uterine tumours in rabbits by ovarian hormone, A., 649.
- Pierucci, M., effect of electric charge on conductivity of a metal foil, A., 435.
- Pierzchalski, P., poisoning and activation of aluminium, A., 309.
- Pieters, H. A. J., iodometric determination of copper; determination of copper in white metal, A., 1216. Mixed indicators, A., 1336. Determination of pyridine in presence of ammonia, A., 1390. Iodometric determination of phenol, A., 1390. Determination of antimony in alloys, B., 996. Oxidimetric determination of [triblumbic tetroxide] content of red lead, B., 1004.
- and Penners, K., determination of naphthalene, B., 1036.
- Penners, K., and Geel, W., determination of naphthalene in gas, B., 933.
- Pietrek, W. See Broniewski, W.
- Pietrzykowski, T., control of alkalinity of carbonated [sugar] juices, B., 692.
- See also Smolenski, K.
- Pietsch, E. See John, H.
- Piettre, M., physico-chemical effect of some electrolytes on myxoprotein of blood-serum, A., 1261.
- Boutaric, A., and Roy, (Mlle.) M., aqueous solutions of proteins, A., 164.
- See also Achard, C.
- Pietzner, J. See Seuffleben, H.
- Pigal, R. A. See Delot, M. H. V.
- Piggot, C. S., isotopic composition of the leads of Great Bear Lake, A., 1100.
- Piggott, H. A. See Imperial Chem. Industries.
- Pighini, G., anterior pituitary hormone content of the hypothalamus of the dog, A., 1424.
- Pigman, G. L. See Swenson, J. A.
- Pigot, E. C., analysis of nickel-aluminium-iron alloys, B., 771.
- Pigott, M. G. See Holmes, A. D.
- Pigulevski, G. V., and Ivanova, M. A., new vegetable oil from *Pinus pumila*, Regel, B., 31.
- Pigulevski, V., and Rudakova, N., velocity of absorption of propylene by sulphuric acid, A., 1082.
- Pijper, A., measuring red blood-cells with special reference to a new diffraction apparatus, A., 879.
- Pike, N. R., Ficklen, J. B., and Newell, I. L., organic compounds as analytical reagents. III. Pyrocatechol as reagent for titanium, A., 951.
- Pike, R. D., and Kalif Corp., centrifugal casting [of copper-lead alloy bushings], (P.), B., 193.
- Pikl, J. See Julian, P. L.
- Pil, J. F. See Kurtzchatov, P. A.
- Pilat, S. von, fractionation of petroleum residues and of heavy petroleum by compressed natural gas, B., 1030.
- and Sereda, J., mineral oil sulphonic acids. III. Analysis of their mixtures with naphthenic acids and mineral oil, B., 132.
- and Szankowski, W., mineral oil sulphonic acids. IV. Hydrocarbon complex of γ -sulphonic acids, B., 438.
- See also Godlewicz, M., and Müller, Jakob.
- Pilcher, J. D., atropine tolerance in infants and children; negative action of serum of tolerant subjects, A., 119. Comparative actions of atropine and *l*- and *d*-hyoscyamine in infants and very young children, A., 119.
- Pilipenko, P. P., genesis of agates, A., 1347.
- Pilkington Bros., Ltd., and Wilson, J., tempering of glass, (P.), B., 1143.
- Pillay, P. P., anacardic acid. I. Anacardic acid and tetrahydroanacardic acid. II. Constitution of tetrahydroanacardic acid, A., 1123.
- See also Dey, B. B.
- Pillet, E., orientation and pyroelectricity of crystals of magnesium ammonium phosphates in gall stones, A., 811.
- Pilling, N. B. See Kihlgren, T. E.
- Pilwat, H., variability of nitrogen compounds (NO_2 , NO_3 , and NH_3) in Baltic sea-water, A., 1343. Comparison of the Winkler and Alsterberg methods of determination of oxygen in river, sea, and distilled waters, B., 704.
- Piña de Rubies, S., photometric method for optical spectral analysis, A., 58. Arc spectrum of neodymium, at normal pressure, between 3100 and 2400 Å., A., 556.
- and Doetsch, J., elements detectable by arc spectrum analysis in lead minerals, A., 463.
- and Lemmel, L., spectroscopic study of different woods of Fernando Po and the Iberian Peninsula, A., 1289.
- Pincherle, L., eigenfunctions for electrons of heavy elements, A., 804. Intensity of X-ray lines of gold, A., 1047.
- Pinck, L. A., Howard, L. B., and Hilbert, G. E., nitrogenous composition of ammoniated peat and related compounds, B., 602.
- Pinckard, J. A., pathogenic bacteria which induce cell stimulation in plants, A., 798.
- Pineus, G. See Burdick, H. O.
- Pincussen, L., effect of irradiation with mixtures of ultra-violet and visible light on carbohydrate metabolism, A., 892. Effect of irradiated oats on carbohydrate metabolism, A., 892.
- Pineo, O. W. See Hilger, Ltd., A.
- Pines, A. I. See Kritschewski, I. L.
- Pines, B. J., hydromechanics of the Bessmer converter in relation to attrition of the fireproof lining, B., 951.
- See also Budnikov, P. P.
- Pines, H. See Ipatiev, V. N.
- Pines, P. R., acid tin-plating, B., 502.
- Piness, G. See Alles, G. A.
- Ping, K., liquid-phase cracking of vegetable oils, B., 980. Oil shales in China, B., 1029. Catalytic conversion of peanut oil into light spirit, B., 660.
- Pingault, P., preparation of [iron-tin] alloys, A., 181.
- Pingree, R. A., application of soluble [sulphonated] oils in the processing of textiles, B., 897.
- Pinkard, F. W. See Cox, E. G.
- Pinney, L. E., characteristics of mercury-vapour pumps, A., 1342.
- Pinoff, F. M. O., and Patent & Licensing Corp., waterproof crepe paper, (P.), B., 799.
- Pinotti, F. See Bonsignore, A., and Martini, E.
- Pinsker, S., diffraction of fast electrons by crystallised rock-salt, A., 1309.
- Pinsky, P. See Asmundson, V. S.
- Pinsl, H., rapid photometric determination of silicon in light metals, B., 771.
- Piolunkovskaja, M., chlorinated rubber, B., 418.
- Piotrowski, W. von, and Winkler, J., treatment of [town] gas, (P.), B., 936.
- Piper, C. S., volumetric determination of potassium by the cobaltinitrite method, A., 317, 836.

- Piper, J. D., and Brode, W. R., relation between absorption spectra and chemical constitution of dyes. VII. Separation of chromophores in symmetrical bisazodyes, A., 338.
- Piper, S. H., Chibnall, A. C., and Williams, E. F., m.p. and long crystal spacings of higher primary alcohols and *n*-fatty acids, A., 152.
- See also Chibnall, A. C.
- Piper, W. H., and Glensol, Ltd., water-softening apparatus, (P.), B., 755.
- Piquet, G., tenacity of two manganese-silicon steels, B., 905.
- Piquet, J. See Liengme, A.
- Piratzky, W., and Rehberg, R., evaluation of malt, B., 569.
- Piriaux, E., making silage with addition of acid, B., 251.
- Pirie, W. G., Chester, C. A., and Melville, W., surfacing of sheet material with pigments, varnishes, lacquers, waterproofing solutions, etc., (P.), B., 816.
- Pirie, Appleton & Co., Ltd. See Knaggs, J.
- Pirogov, A., refractory bricks in ovens for carbonisation of pitch, B., 993. Improving the thermal stability of bricks used for lining coke-oven doors, B., 1094.
- Pirosky, I., ultra-violet absorption spectra of normal antitoxic and antimicrobial serums and their respective protein fractions, A., 1395. Ultra-violet absorption spectrum of cerebrospinal fluid in progressive general paralysis, A., 1399.
- Pirot, R. See Le Chuiton, F.
- Pirrone, F., alicyclic compounds. I. Synthesis of β -ketoamines, A., 1367.
- Pirsch, J., molar heats of fusion of organic compounds and their dependence on m.p., A., 290.
- and Jörgl, J., relationships between constitution and magnitude of mol. heat of fusion of organic compounds. II. Synthesis of 1:4-endoazocyclohexane, A., 1133.
- Pirschle, K., physiological action of elements on growth of *Aspergillus niger* (stimulation and toxicity), A., 535.
- Pirtea, D. See Chaborski, G. L.
- Pisapia, E. A. See Schuman, L.
- Pisarenko, N., scattering of fast electrons by crystals, A., 1195.
- Pisarshevski, L. V., and Glikman, T. S., influence of solvent on heterogeneous catalysis; catalysis of hydrogen peroxide in different solvents. I., A., 455.
- Korabelnik, R. K., and Rinskaja, E. S., combined action of radiation and a catalyst. I. Influence of ultra-violet light on activity of the catalyst in catalysis of hydrogen peroxide in aqueous solution, A., 47.
- Pishavikar, D. G. See Shah, S. V.
- Pistiner, R. See Rappaport, F.
- Pistocco, V. L., and Screen Advertising, Inc., plastic composition, (P.), B., 737.
- Pitkin, Inc., L. See Tour, S.
- Pitman, G., oil content as a criterion of olive maturity, B., 1002.
- Pitres, E. See Girard, P.
- Pitt, A., and Jackson, W. J., velocity of sound in low-temperature liquids at ultrasonic frequencies, A., 1197.
- See also McLennan, J. C.
- Pitt, R. M. See Felix, A.
- Pittard, J. J., and Schiess, A., production of illuminating gas by cracking bituminous sandstones, B., 211.
- Pittarelli, M., detection of boiled milk in raw milk, B., 42.
- Pitter, A. V., viscose rayon: its manufacture and properties, B., 350.
- See also North Brit. Rayon.
- Pittius, G., material basis of osmotic pressure in *Hedera helix* and *Ilex aquifolium*, A., 1288.
- Pittman, M. S., McCammon, R. B., and Holman, M., utilisation of meat by human subjects. I. Utilisation of nitrogen and phosphorus of loin and heel cuts of beef, A., 652.
- Pittman, (Miss) V. P. See Kenyon, J.
- Pitts, P. P. See Forbes, J. C.
- Pittsburgh Coal Carbonization Co., and Leshner, C. E., carbonisation of coal, (P.), B., 661.
- Pittsburgh Paint & Varnish Production Club, comparison of various pigments and vehicles in rust-inhibitive primers, B., 31.
- Pittsburgh Plate Glass Co., Boss, A. E., Allen, E. M., and Lynn, G., production of finely-divided calcium carbonate, (P.), B., 991.
- See also Hittner, H. F., Miller, R. A., Owen, W., and Parkinson, J. C.
- Pittsburgh Research Corporation. See Simpson, G. L.
- Pitzer, K. S. See Noyes, A. A.
- Pivovarsky, E., development of heat-resistant alloys, B., 230.
- See also Söhnechen, E., and Zech, R.
- Pizer, N. H., determination of nicotine by the silicotungstic acid method, A., 102.
- See also Goodwin, W.
- Pizey, R. D. G. See under Pizey & Son, G.
- Pizey & Son, G., flux-cored solders, (P.), B., 1099.
- Place, P. B., analyses of coals of the United States, B., 789.
- Plachotniuk, G. S. See Vorontschichin, V. E.
- Plagge, H. H., effects of continued application of nitrates on composition of apples and their keeping qualities in cold storage, B., 1157.
- Plahl, W., detection of bilberry juice in wine, B., 744. Detection of extracted schizocarps [used for manufacture of kummel], B., 745.
- Plake, E., b.p. elevations of aqueous solutions of strong electrolytes, A., 443. Improved differential ebullioscope, A., 465.
- Plaksin, I. N., theory of amalgamation process, B., 64.
- and Koshuchova, M. A., losses of precious metals during melting, B., 905.
- and Suvorovskaja, N. A., treatment of low-grade gold ores, B., 500.
- Plaksina, E. F. See Osokoreva, N. A.
- Planck, M., theory of diffusion of electrolytes, A., 443. Electrical excitation in electrolytes, A., 699.
- Planiol, R., production of ions in a high vacuum, A., 425. Currents of positive ions produced in a high vacuum, A., 599.
- Plank, E., drop reaction for hydrogen peroxide, A., 52.
- Plank, R., thermal conductivity of various liquids, A., 1455.
- and Walger, O., thermal conductivity of carbonic acid, A., 1455.
- Planktoll Chemische Fabrik G.m.b.H., and Carpzow, J. B., chemically reactive artificial asphalt of unlimited stability, (P.), B., 1126.
- Plant, J. H. G. See Griffith, R. H.
- Plant, (Miss) M. M. T. See Haworth, W. N.
- Plant, S. G. P., Rogers, (Miss) K. M., and Williams, S. B. C., Friedel and Crafts reaction in the carbazole series, A., 990.
- and Tomlinson, (Miss) M. E., structure of glutaryl chloride, A., 961. ω -3-Amino-4-methoxy- and -ethoxy-benzoyl derivatives of propionic, butyric, and valeric acids, A., 1236.
- Plantefol, L., respiratory action of nitrophenols, A., 405. Action of 2:4-dinitrophenol on yeast respiration, A., 785.
- and Champetier, G., action of heavy water on reviving animals, A., 531. Action of heavy water on germination of pollen, A., 552.
- Plantin, B., and Dumont, P., treatment of waters, (P.), B., 336.
- Plantinga, O. S. See Rodden, C. J.
- Plastic Products, Inc. See Randall, G. M.
- Plastic Safeglass Syndicate. See Simmons, W. H.
- Plastix Corporation. See Meigs, J. V.
- Plate, A. F. See Kasanski, B. A., and Zelinski, N. D.
- Platen-Munters Refrigerating System. See Electrolux, Ltd.
- Plato, G., wave mechanical calculation of atomic properties, A., 279.
- Platonov, M. M., origin of polyhalides and polysulphides, A., 945.
- Platonov, M. S., Anissimov, S. B., and Krascheninnikova, V. M., catalytic properties of rhodium, A., 830.
- Platschenov, T. G. See Alexeevski, E. V.
- Plattner, F., substance resembling acetylcholine in adrenals and other organs, A., 232.
- Plattner, P. See Pfau, A. S.
- Platz, H. See Schenk, P. W.
- Platzer, N. See Späth, E.
- Platzmann, C. R., cement testing, B., 455. Waterproofing agents for mortars, B., 547. Controlling the setting time of a cement, B., 805. Progress in cement research in 1934, B., 1095.
- Plaut, F., Bülow, M., and Pruckner, F., determination of vitamin-C in brain, cerebrospinal fluid, and serum, A., 1036.
- and Stern, K., distribution of vitamin-C in the brain-stem ganglia, A., 1287.
- Plawenn, A. von, Kerstein, G., Feix, R., and Scheinberger, E., curds (cascin), fresh cheese, and rennet cheeses from cream, whole milk, or skim milk, (P.), B., 122.
- Player, E., use of magnesium alloys in aircraft construction, B., 720.
- Plažek, E., and Sasyk, Z., phosphoropyridine compounds, A., 368.
- See also Rodewald, Z.
- Pleass, (Miss) W. B., pickling of sheepskins. II. Pickling in presence of organic acids, B., 280.
- Plein, E. M. See Poe, C. F.
- Plesch, J., blood-gas analysis apparatus with a filter-cell, A., 507.
- Pleschtizer, A., and Preobrajensky, A. A., determination of minimal concentrations of arsenic in expired air, A., 1022.
- Pleskov, V. A., and Monoszon, A. M., activity of ammonium ions in liquid ammonia, A., 1077.
- Plesniewicz, S., diffusion coefficients of electrolytes, and ionic mobilities, A., 304.
- Plesse, H., electric arc, A., 676.
- Plesset, M. S., and Wheeler, J. A., inelastic scattering of quanta with production of pairs, A., 1297.

- Plesset, *M. S.* See also Oppenheimer, *J. R.*
- Pletenev, *S. A.*, and Ivanova, *A. N.*, electrolytic production of lithium, *B.*, 502.
- Pletnik, *I. I.*, Velitschkovski, *A. V.*, and Fridman, *I. O.*, nephelometric determination of sulphur dioxide in air, *A.*, 948.
- Plettinger, *E.* See Müller, *W. J.*
- Pletz, *V.*, relation between explosiveness and chemical structure, *A.*, 938.
See also Salkind, *J. S.*
- Plevako, *E.*, and Kinsburgskaja, *F.*, effect of activated carbon on fermentation of molasses, *B.*, 1016.
- Plibrico Jointless Firebrick Co. See Anderson, *J. E.*
- Plice, *M. J.*, acidity, anti-acid buffering, and nutrient content of forest litter in relation to humus and soil, *B.*, 245.
- Plisov, *A. K.*, and Golendeev, *V. P.*, synthesis of esters of oleic and elaidic acids, *A.*, 1350. Relative velocities of hydrogenation of esters of oleic and elaidic acids, *A.*, 1350.
- Plitt, *T. M.*, temperature as a predetermining factor in the development of *Avena sativa*, *A.*, 1288.
- Pliuschkin, *E. Z.*, preparation of trihydroxyglutaric acid from xylose, *A.*, 327. Delinting cottonseed with sulphuric acid and the production of ethyl alcohol as a by-product, *B.*, 444. Application of viscosity in study of cotton fibre, *B.*, 445.
and Tschetverikov, *N. M.*, preparation of crystalline xylose from sunflower-seed husks, *B.*, 329.
- Plötner, *K.* See Sturm, *A.*
- Plokhotzki, *E. S.* See Kijarfeld, *B. N.*
- Plonait, *C.*, origin, formation, and chemical processing of amber, *A.*, 1431. Amber research, *B.*, 465.
- Ploos van Amstel, *J. J. A.* See Burgers, *W. G.*
- Plotkin, *Z. I.* See Schujkin, *N. I.*
- Plotnikov, *V. A.*, Fialkov, *J. A.*, and Tschalij, *V. P.*, electrical conductivity of solutions of lithium, sodium, and rubidium iodides in molten iodine, *A.*, 584.
- Fortunatov, *N. S.*, and Siusskin, *N. M.*, electrolytic refining of aluminium in the system $\text{AlCl}_3\text{-NaCl}$, *B.*, 65.
- and Gorenbein, *E. J.*, electrochemical study of the system $\text{AlBr}_3\text{-CuBr}$ in ethyl bromide, *A.*, 449.
- Gratzianski, *N. N.*, and Demtschenko, *Z.*, aluminium plating of alloys in a molten $\text{AlCl}_3\text{-NaCl}$ mixture, *B.*, 65.
- and Ivanov, *K. N.*, pyrophoric properties of copper methyl alcohol catalysts, *A.*, 175.
- and Jakubson, *S. I.*, electrochemical study of the system $\text{AlBr}_3\text{-KBr}$ in ethyl bromide, *A.*, 942.
- Katznelson, *I. L.*, and Fridman, *S. G.*, electrochemical oxidation of toluene in aqueous-etheral phosphoric acid solution, *A.*, 1114.
- and Zosimovitsch, *D. P.*, formation of alloys from galvanic elements, *A.*, 1080.
- Zosimovitsch, *D. P.*, Kudra, *O. K.*, and Podorvan, *I. M.*, electrochemical preparation of aluminium oxide from aqueous aluminium sulphate, *A.*, 942; *B.*, 723. Electrolytic preparation of alumina from clay, *B.*, 99.
- Ploum, *H.* See Bardenheuer, *P.*
- Plouvier, *V.*, isomerisation of cyanogenic heterosides, *A.*, 1083. Amygdonitrile glucoside and amygdaloside in plants, *A.*, 1181.
- Ployé, *M.*, influence of aluminium on properties of cast iron, *B.*, 853.
- Plücker, *R.*, cooling and lubrication during meta-working, *B.*, 153. Polish [of metals] and corrosion protection, *B.*, 905.
- Plücker, *W.*, substances used in gas warfare, and foodstuffs, *B.*, 44. Determination of dirt in milk, *B.*, 874.
- Plum, *K.* See Diltthey, *W.*
- Plummer, *G. A.*, furnaces, (P.), *B.*, 788.
- Plummer, *H.*, anti-toxin content of human serum in relation to the Dick reaction, *A.*, 644.
- Plummer, *W. B.*, and Combustion Utilities Corp., gas generator for pulverised fuel, (P.), *B.*, 213.
- Plunguian, *M.*, and Hibbert, *H.*, lignin and related compounds. XI. Nature of lignite humic acid and of the so-called "humic acid" from sucrose, *A.*, 623.
- Plungyanskaja, *M. N.* See Zherebov, *L. P.*
- Plunkett, *J. A.* See Kinzie, *C. J.*
- Plyler, *E. K.* See Barker, *E. F.*
- Pochettino, *A.*, external photo-electric effect and chemical constitution, *A.*, 147.
- Pochon, *J.*, rôle of a cellulolytic bacterium of the stomach in conversion of cellulose into glucose in alimentary canal of ruminants, *A.*, 125.
- Pockman, *L. T.*, Kirkpatrick, *P.*, and Webster, *D. L.*, X-ray line intensities in thick targets of nickel, *A.*, 1438.
See also Webster, *D. L.*
- Pocoulé, *A.* See Ungar, *G.*
- Poda, *E.*, chemico-microscopic detection and determination of fluorine in natural waters, *B.*, 832.
- Podashevski, *M.*, effect of photochemical coloration on elastic limit and strength of single crystals of rock-salt, *A.*, 1452.
- Podbielniak, *W. J.*, [fractional] distillation [temperature]-control device, (P.), *B.*, 532.
- Podolskaja, *M.* [with Schapiro, *M.*, and Iserga, *M.*], influence of gossypol on colour of cottonseed oil, *B.*, 732.
- Podorvan, *I. M.* See Plotnikov, *V. A.*
- Podrousek, *V.* See Bergauer, *V.*
- Podschus, *E.* See Leschewski, *K.*, and Sonn, *A.*
- Poe, *C. F.*, and Gambill, *E. L.*, vitamin- B_2 content of home-canned tomato juice, *B.*, 572.
and Klemme, *D. E.*, fermentation of rare sugars by colon and aërogenes groups of bacteria. II. Cellobiose, *A.*, 786.
and Nalder, *M. E.*, combination of catalysts to reduce digestion time in determination of nitrogen. I. In organic compounds, *A.*, 876.
and Plein, *E. M.*, optical activity of camphor in alcoholic solutions, *A.*, 14.
and Strong, *J. G.*, [substituted] benzoates of codeine, *A.*, 505.
- Suchy, *J. F.*, and Baker, *G. L.*, solubilities of strychnine benzoates, *A.*, 695.
and Swisher, *C. A.*, optical crystallographic data for salts of cinchonine, *A.*, 765.
- Wyss, *A. P.*, and McEver, *T. G.*, composition of commercially canned tomato juice, *B.*, 122.
- Poe, *C. F.* See also Swisher, *C. A.*
- Poehlman, *J. M.*, plant-juice analyses as indicators of nutrient needs of plants, *B.*, 646.
- Pöhl, *P.* See Reiff, *F.*
- Pöll, *H.* See Suida, *H.*
- Pölguter, *F.*, construction and use of coreless induction furnaces in electric steel works, *B.*, 811.
- Pöpperle, *J.* See Bierbrauer, *E.*
- Pörtner, *F.* See Keil, *W.*
- Pöschel, *A. B.*, and Decorative Development, Inc., printing and dyeing [of fabrics], (P.), *B.*, 542.
- Poethke, *W.*, ester hydrolysis in pure water, *A.*, 938.
- Poffenberger, *N.* See Beattie, *J. A.*
- Pogány, *A.*, determination of the resistance of concrete to corrosive solutions, *B.*, 675.
- Pogány, *B.*, Zeeman splitting of lines of krypton I, argon I, and xenon I spectra, *A.*, 423.
- Poggi, *R.* [with Gottlieb, (Miss) *M.*], cyclic ketones. IV., *A.*, 345.
- Poggio, *F.* See Catalán, *M. A.*
- Pogodin, *S. A.*, and Guseva, *M. S.*, corrosion of galvanised iron in aerated boiling water and in air-steam mixtures, *B.*, 410.
Micheeva, *V. I.*, and Kagan, *G. A.*, limits of α -phase in the system copper-cadmium, *A.*, 576.
- Pogrebov, *N. F.*, bituminous shale deposits of the Petrograd district, *B.*, 1028.
- Pohjala, *A.* See Routala, *O.*
- Pohl, *E.*, welding of nickel steel, *B.*, 594.
and Pohl, *S.*, sulphonated oils, (P.), *B.*, 160.
- Pohl, *H.* See Némec, *A.*
- Pohl, *J.*, electron-optical images with photo-electrically liberated electrons, *A.*, 139.
- Pohl, *R.*, artificial teeth of ceramic material, *B.*, 674.
- Pohl, *R. W.*, mechanism of electrical conductivity, *A.*, 153. Colour centres of alkali halide crystals, *A.*, 915.
See also Hilsch, *R.*
- Pohl, *S.* See Pohl, *E.*
- Pohl, *W.*, and Deuts. Gold- & Silber-Scheideanstalt vorm. Roessler, acetone from acetylene, (P.), *B.*, 139.
- Pohle, *K.*, cardio-stimulatory form of calcium, *A.*, 782.
- Pohlman, *G. G.* See Dodd, *D. R.*
- Pohlman, *R.*, rendering visible ultra-sonic waves in gases and determination of their intensities, *A.*, 1062.
See also Hettner, *G.*
- Poi Jarvis, *I.*, trials with A.I.V. fodder, *B.*, 971.
- Poillon, *H. A.*, and Research Corp., electrical precipitator [for treating gases], (P.), *B.*, 911.
- Poindexter, *F. E.*, and Rosen, *J. S.*, effect of pressure on the refractive index of aqueous solutions of ethyl alcohol, *A.*, 1318.
- Pojartieff, *G.*, synthesis and reactions of α -hydroxyketones; derivatives of ϵ -hydroxyhexan- β -one and 2:5-dimethyl-4:5-dihydrofuran, *A.*, 351.
- Pokrovski, *G. V.* See Vafadi, *V. G.*
- Polanyi, *M.*, heavy water in chemistry, *A.*, 189. Adsorption and catalysis, *A.*, 711.
See also Bottomley, *G. H.*, Evans, *M. G.*, Heller, *Wilfried*, Horiuti, *J.*, Kenner, *J.*, and Ogg, *R. A.*, *jun.*

- Polden, D. C.**, chemical treatment [bleaching] of corneous materials [*e.g.*, tortoise-shell], (P.), B., 819.
- Polesitski, A.**, distribution of radioactive substances between crystalline and liquid phases. IX. Distribution of U-X₁ between crystals and solution of U(SO₄)₃·4H₂O at 100°, A., 27. Distribution of small amounts of substances between liquid and solid crystalline phases. II. Distribution of barium nitrate between saturated aqueous solution and strontium nitrate crystals, A., 577.
- Polgár, A.**, and **Halmos, C.**, photographic bleaching-out layers, (P.), B., 879.
- Polhamus, L. G.**, **Hill, H. H.**, and **Elder, J. A.**, rubber content of two species of *Cryptostegia* and of an interspecific hybrid in Florida, B., 778.
- Pollicard, A.**, histo-spectrographic study of fixation of manganese in experimental chronic intoxication by manganese dioxide, A., 1533.
- and **Favier, R.**, apparatus for continuous extraction of aqueous solutions by non-miscible solvents, A., 189.
- and **Rojas, P.**, study by micro-incineration of red corpuscles of the teleostean fish, *Cichlasoma fasciatum*, A., 1517.
- Polinov, B. B.**, genetic analysis and morphology of soil profiles, B., 964.
- Polissar, M. J.**, rates of evaporation of chlorine, bromine, and iodine from aqueous solutions, A., 439.
- Poljakov, M. V.**, heterogeneous-homogeneous catalysis of the reaction between hydrogen and oxygen, A., 588. Mechanism of sulphur dioxide oxidation in presence of vanadium catalysts, B., 991.
- Malkin, I. M.**, and **Alexandrovitch, V. A.**, mechanism of hydrogen-oxygen explosions, A., 1080.
- Stadnik, P. M.**, and **Elkenbard, A. T.**, heterogeneous-homogeneous catalysis; hydrogen and oxygen in presence of platinum. III., A., 1085.
- Stadnik, P. M.**, **Paritzki, M. V.**, and **Malkin, I. M.**, structure of silica gel, A., 1075.
- Poljakov, T. M.** See **Rakovski, E. F.**
- Poljakov, V. D.**, preparation of metallic barium and its amalgams, A., 180.
- Poljakova, A. M.** See **Preobrazhenski, N. A.**
- Polk, I. H.** See **Keller, H. W.**
- Pollack, A.**, electroplating, B., 65. Black chromium-plating, B., 233.
- See also **Bauer, S. H.**
- Pollack, H.**, **Flock, E.**, and **Bollman, J. L.**, compounds of phosphorus in the heart and striated muscles of the dog, A., 521.
- Flock, E.**, **Essex, H. E.**, and **Bollman, J. L.**, phosphorus compounds in the perfused heart of the dog, A., 521.
- Flock, E.**, **Mason, P.**, **Essex, H. E.**, and **Bollman, J. L.**, changes in phosphorus compounds in the perfused hind limb of the dog, A., 521.
- Millet, R. F.**, **Essex, H. E.**, **Mann, F. C.**, and **Bollman, J. L.**, serum-phosphate changes induced by injection of glucose into dogs under various conditions, A., 521.
- Pollack, Hans.** See **Rapatz, F.**
- Pollacci, G.**, influence of the pyrrole nucleus on formation of chlorophyll, A., 1039.
- Pollak, F.**, and **Synthetic Plastics Co., Inc.**, [urea-formaldehyde] resin-like condensation products, (P.), B., 111.
- Pollak, J. E.**, and **Chem. Werke Marienfelde A.-G.**, beer, (P.), B., 1113.
- Pollak, Leopold, Fischer, L. J.**, and **Pollatschik, E.**, determination of hydrolysable (pyrogallol) tannins in presence of condensed (pyrocatechol) tannins, B., 862.
- Pollak, Lili.** See **Kocsis, E. J.**
- Pollard, A.** See **Chibnall, A. C.**
- Pollard, C. B.**, and **Amundsen, L. H.**, benzenesulphonyl derivatives of *o*-aminophenol, A., 484.
- Bain, J. P.**, and **Adelson, D. E.**, derivatives of piperazine. III. Reactions with unsaturated esters. I., A., 502.
- and **Forsee, W. T., jun.**, rapid determination of carbon in organic compounds, A., 369.
- See also **Adelson, D. E.**, **Amundsen, L. H.**, and **Forsee, W. T., jun.**
- Pollard, E.**, nuclear potential barriers, A., 804.
- and **Eaton, W. W.**, disintegration of nitrogen and boron and possible emission of neutrons, A., 802.
- and **Margenau, H.**, experimental evidence regarding field of the deuteron, A., 560. Collisions of α -particles in deuterium, A., 910. Collisions of α -particles in hydrogen, A., 1295.
- Pollard, F. H.** See **Garner, W. E.**
- Pollatschek, H.**, valve voltmeter, A., 952.
- Pollatschik, E.** See **Pollak, Leopold.**
- Pollock, J. J.**, local use of compressed gas for vehicle operation, B., 660.
- Pollock, R. C.** See **Bray, U. B.**
- Polly, O. L.** See **Rice, F. O.**
- Polonovski, M.**, colorimetric determination of polypeptides by triketohydrindene hydrate [ninhydrin], A., 1390.
- Bizard, G.**, and **Boulanger, P.**, secretion of ammonia in experimental nephritis, A., 650. Ammoniophanæresis in the course of experimental cantharidine nephritis in the dog, A., 895.
- and **Boulanger, P.**, modification of apparatus and technique for micro-determination of ammonia in biological liquids, A., 1436. Ammonia content of human and cow's milk, A., 1524.
- and **Moreno-Martin, F.**, colorimetric determination of amino-acid function by triketohydrindene hydrate (ninhydrin), A., 1044. Mechanism of the Umikoff reaction, A., 1267.
- Warembourg, H.**, and **Driessens, J.**, action of thyroid secretion on variations of chronic residual index of blood-plasma, A., 1032. Effect of injections of extract of spleen on metabolism of carbohydrates, A., 1530.
- Warembourg, H.**, and **Lamour, P.**, modifications of the glycerol content of the blood in glycolysis *in vitro*, A., 1518.
- See also **Grandclaude, C.**
- Polonskaja, L. A.** See **Sabinina, L. E.**
- Poloskin, E.** See **Merzlikin, F.**
- Polozov, V. F.** See **Kliukvin, N. A.**, and **Rapoport, I. B.**
- Pols, P., jun.** See **Böeseken, J.**
- Poltoratzkaja, O.** See **Karpatschev, S.**
- Polubinski, Z.** See **Hrynakowski, K.**
- Poluektov, N. S.**, reactions for germanic and boric acids, A., 1095.
- See also **Komarovski, A. S.**
- Polushin, D.**, volumetric determination of sulphates, A., 53.
- Polushkin, E. P.**, effect of cold-work on microstructure of low-carbon steel tubes, B., 190.
- Polvani, G.**, general form of equation of state for a monatomic ideal gas, A., 157.
- Pomales-Lebron, A.** See **Morales-Otero, P.**
- Pomeranec, J.** See **Terres, B.**
- Pomeranz, R.**, acute silicosis, A., 651.
- Pomeroy, W. E.**, testing dry colours [pigments], B., 598.
- Pommé, B.** See **Leulier, A.**
- Pommerenke, W. T.**, **Slavin, H. B.**, **Kariher, D. H.**, and **Whipple, G. H.**, dog plasma-protein given by vein utilised in body metabolism of dog; horse plasma and dog hæmoglobin not similarly utilised, A., 1152.
- Pomortzev, M. E.** See **Kortschemkin, F. I.**
- Pomoshin Werke G.m.b.H.** See **Feix, R.**
- Pomothy, R. von**, physiology of the surviving mammalian heart. VIII. Consumption of sugars by surviving hearts of diabetic cats, A., 383.
- Pomp, A.**, coarse-grained recrystallisation of high-carbon steel, B., 26. Local martensite formation in steel wire, B., 26. Influence of carbon content and heat treatment on ductility of steel wire, B., 410. Influence of carbon content and conditions of patenting on tenacity of drawn steel wires, B., 410.
- Ponce, L. P.** See **Sagastume, C. A.**
- Poncher, H. G.**, **Visscher, M. B.**, and **Woodward, H.**, creatine metabolism in children with hypothyroidism, A., 108.
- See also **Hess, J. H.**
- Ponder, E.**, osmotic behaviour of red cells. I. and II., A., 229. Kinetics of hemolytic systems. VII. Disappearance of lysin during stromatolysis, A., 881. Relation of red-cell diameter and number to light-transmission of suspensions, A., 1141. Measurement of red-cell volume. VI. Different "fragility" of the red cells of various mammals, A., 1141.
- and **Gaunt, R.**, swelling of muscles of adrenalectomised rats, A., 410.
- and **Gordon, A. S.**, kinetics of hæmolysis in cell-taurocholate-serum systems, 771.
- and **Marsland, D.**, escape of hæmoglobin from the red cell during hæmolysis, A., 1517.
- and **Robinson, E. J.**, measurement of red-cell volume. V. Behaviour of cells from oxalated and from defibrinated blood in hypotonic plasma and saline, A., 770.
- Pongratz, A.**, and **Markgraf, G.**, perylene and its derivatives. XLIV., A., 1370.
- See also **Kohlrausch, K. W. F.**
- Poni, M.**, isomeric amines from cyclic diamines and metallic salts. II., A., 1089.
- See also **Cernatescu, R.**
- Ponomareva, N. P.** See **De Kolosovski, N. A.**
- Ponomarjev, V. D.** See **Tananaev, N. A.**
- Pons, H.** See **Dalous, E.**
- Ponse, K.** See **Held, E.**
- Ponte, D.**, new derivatives of 2:2'-dinitrobenzidine. II. and III., A., 613, 1489.
- See also **Angeletti, A.**
- Pontecorvo, B.**, effect of mercury vapour on the high [spectral] terms of the alkali [metals], A., 1.
- See also **Amaldi, E.**

- Ponthus, P., photometric study of effect of natural waters on human serum *in vitro*, A., 374.
- Pontillon, C., influence of calcium on development of *Aspergillus niger* in a medium deficient in potassium, A., 255. Can excess of a metal correct insufficiency of potassium in development of *Aspergillus niger*? A., 1027.
- Pontoppidan, C., Portland cement, (P.), B., 271, 456.
- Pontz, D. F. See Kinney, C. R.
- Pontzen, H., and Amer. Lurgi Corp., [reverberatory] melting furnace, (P.), B., 555.
- Ponzini, A., concentration, distillation, or evaporation of liquid substances, (P.), B., 435.
- Ponzio, G., and Biglietti, F., dioximes. CIV., A., 345.
- Pool, M. L., and Prashun, O. W., emission and absorption from the 2^3P_0 metastable level in mercury, A., 1438.
- Poole, C. A., and Werner, W. S., recent developments in commercial production of super-voltage X-ray tubes and generating apparatus, B., 1001.
- Poole, H. H., and Atkins, W. R. G., measurement of current generated by a rectifier photo-electric cell, A., 58. Standardisation of photo-electric cells for measurement of visible light, A., 1475.
- Poole, J. W., fractionating mixtures of hydrocarbons and their derivatives, (P.), B., 346.
- Poole, R. F., arsenical injury of the peach, B., 1062.
- Poor, N. H. See Merritt, M. M.
- Poore, H. D., apple juices, concentrates, and syrups. I., B., 476. Passion fruit products, B., 698.
- Pooten, A. C. ter. See Waterman, H. I.
- Popa, S. See Rădulescu, D.
- Pope, P. C. See Bristow, W. A.
- Pope & Co. Ges.m.b.H., working up acid sludge, etc. [from petroleum, etc. refining], (P.), B., 10.
- Popesco, C. See Ionesco-Matiu, A.
- Popesco, I. See Eustatziou, G.
- Popesco, S. See Maxim, N.
- Popham, W. J., and Minnesota Metallurg. Co., steel, (P.), B., 273.
- Popov, B. See Neujmin, H.
- Popov, B. V. See Vasiliev, Z. V.
- Popov, M. M., Feodosiev, N. N., and Skuratov, S. M., heat capacity of aqueous solutions of phosphoric acid, A., 705.
- Khomjakov, K. G., Feodosiev, N. N., and Shirokikh, P. K., determination of the heat capacity of aqueous solutions and the heat of solution of salts, A., 705.
- Popov, N. F., and Timofeev, L. I., chemistry of wheat ripened after harvesting in storage, silos, or elevators, B., 1017.
- Popov, N. M., geological geophysical prospecting for bituminous shale deposits in the Lower Volga area, particularly in the Obshchi Suirt district, A., 841.
- Popov, P. G., detection of nitrate ions, A., 948. Reaction for cadmium, A., 950. and Nechamkina, M. A., determination of chromium by the liquid amalgam method, A., 1216.
- Popova, A. See Kulikov, V.
- Popova, A. N. See Bolotov, B. A., and Dolgov, B. N.
- Popova, M. K. See Bizov, B. I.
- Popova, N. V. See Tarasov, P.
- Popovic, B. See Pushin, N.
- Popovici, N. See Hofmann, R.
- Popoviciu, G., rôle of mineral metabolism in incipient infantile tuberculosis, A., 386.
- and Benetato, G., glycolysis in tissues of rachitic animals, A., 386.
- Benetato, G., and Oprean, R., rachitogenic action of cereals; calcium and phosphorus liberated by digestion of cereals *in vitro*, with or without sodium chloride, A., 1025.
- Benetato, G., and Oprisiu, C., aminonogenesis; blood-ammonia in tetany from hyperventilation, A., 1011.
- and Munteanu, N., methylglyoxal in infantile food disorders; relations with avitaminosis-B₁, A., 108. Production of methylglyoxal in rachitic tissues, A., 776.
- and Oprisiu, C., origin of blood-ammonia, A., 642.
- Popp, M., causes of corrosion in wires of heating elements, B., 459. Manuring of newly cultivated soils, B., 515.
- See also Bömer, A.
- Poppe, G. See Timmermans, J.
- Poppema, T. J., and Jaeger, F. M., specific heats of solid substances at higher temperatures. XIX. Specific heats of zinc, magnesium, and their binary alloy $MgZn_2$, A., 924.
- Popper, E. See Spacu, G.
- Popper, H. See Böck, J.
- Popper, K. See Bondy, H.
- Popper, L., potassium ferrocyanide poisoning and injury to the kidneys, A., 895.
- Popper, W., jun. See Lepkovsky, S.
- Poppy, W. J., electrical resistivities of single and optically mosaic zinc crystals, A., 20.
- Popzova, A. I. See Kosmin, N. P., and Resnitsheenko, M. S.
- Pora, E. A., mineral differences in blood composition according to sex, in *Cyprinus carpio*, A., 1001.
- See also Gradinesco, E.
- Porai-Koschitz, A. E., dyeing of textiles. VII. Dyeing of wool and cotton with indigo, B., 19.
- and Mandelscham, E. I., condensation of rosaniline with 1-chloro-2,4-dinitrobenzene, A., 81.
- Porchet, B., effect of acetic acid on fermentation of sugar by yeasts in presence of alcohol, A., 661.
- See also Staehelin, M.
- Pordes, F. See Redlich, O.
- Poret, A. A. See Iljinski, V. P.
- Porfiriev, N. A. See Borkovski, A. A.
- Porfirov, P. P., hydrogen overvoltage, A., 707. Rôle of transitory resistance in overvoltage of hydrogen, A., 707. Capacity of polarised mercury electrode, A., 1325.
- Pornton, J. E. See Harber, L. S.
- Porokopenko, N., orthites in mid-Asiatic rocks, A., 842.
- Porowski, S. See Mikulowski-Pomorski, J.
- Porret, D., theories of catalysis, A., 454.
- See also Berthoud, A.
- Porritt, B. D. See Messenger, T. H.
- Porteous, W. K., sewage disposal, (P.), B., 176.
- Porter, C. W., racemisation in preparation of the Grignard reagent, A., 1228.
- and Wilcox, H. B., chlorobenzophenone-oximes, A., 215.
- See also Kumler, W. D.
- Porter, D. C. See Kress, O.
- Porter, D. J., and Cryder, D. S., improved slow-combustion pipette for gas analysis, A., 839.
- Porter, F. R., and Holscher, H. H., use of finely-milled enamel slips, B., 405.
- Porter, G. H. See Benner, R. C., and Nelson, C. S.
- Porter, H. C., softening of coal by heat; is it a distinctive and measurable characteristic? B., 932.
- Porter, L. E., inclusion of rarer metals in elementary qualitative analysis. II. Inclusion of titanium and vanadium in group III., A., 56.
- and Cade, G. N., jun., reactions of titanium and manganese with hydrogen peroxide in basic solution, A., 1339.
- Porter, R. E., and Nat. Oil Products Co., tanning process, (P.), B., 819.
- Portevin, A., and Castro, R., morphology of the inclusions in siderurgical products, B., 951.
- and Chevenard, P., micro-mechanical study of metallic joints, B., 310.
- and Cymboliste, M., influence of the support or cathode on the structure of electrolytic deposits obtained in aqueous solution, B., 997.
- and Herzog, E., corrosion of steels in a wet medium, B., 63.
- Pretet, E., and Jolivet, H., [iron-nickel-tungsten] alloys hardened by heating, B., 360.
- and Seferian, D., absorption of nitrogen on fusion of iron in the arc and the iron-nitrogen diagram, A., 167. Welding of austenitic manganese steels, B., 594.
- See also Moreau, L.
- Portheim, L. See Kissler, J.
- Portman, A. B., development of tungstate and molybdate [lake] pigments, B., 684.
- Portnov, M. A., and Juraylev, A. M., ammoniates of alkaline-earth nitrates, A., 833.
- and Vasiliev, B. B., ammoniates of calcium and barium nitrates. II., A., 159.
- Portsmouth, G. B., effect of ionised air on respiration of green plants, A., 131.
- Porzellanfabrik Kahla, [grooved articles of] pottery, (P.), B., 101. Glazed ceramic products of low coefficient of expansion, (P.), B., 454. Fused glass-ceramic joints, (P.), B., 496. Electric condensers, (P.), B., 774.
- Pose, H., number and range of nuclear protons ejected from aluminium and nitrogen by α -rays, A., 911.
- Posen, E. J. See Shapiro, A., and Weber, I.
- Poser, E., colour centres and plastic deformation of synthetic rock-salt crystals containing foreign atoms, A., 19.
- Posnjak, E. See Greig, J. W., and Tunell, G.
- Posnov, M. V. See Schulwas-Sorokin, R. D.
- Pospechov, D., and Fokin, A., mixtures of asphalt and synthetic rubber for electrical insulation of cables, B., 773.
- Pospišil, J. See Vlček, A.
- Possanner, von, sizing of hand-made laboratory [paper] sheets, B., 845.
- Post, C. B., analytical method for determining preferred orientations of crystals in mechanically worked cubic metals, A., 1060.

- Poste, E. P., welded chemical equipment from special metals, B., 634. Fineness distribution of vitreous enamel as affected by variations in grinding, B., 1093.
- Postel, C. See Vandegriff, J. N.
- Posternak, T., E. Fischer's *allomucic* acid, A., 846. New tetrahydroxyadipic acid, A., 1483. Phosphorus of starches, A., 1549.
- Postma, C., determinations of p_H in meat juices, B., 43.
- Postnikov, N. N. See Zagvozdkin, K. I.
- Postnikov, V. F., and Kirillov, I. P., preparation of sulphur from carboniferous pyrites by combustion with a limited air supply, and in presence of steam, B., 21.
- Kirillov, I. P., and Kunin, T. I., oxidation at a vanadium catalyst of gases of high sulphur dioxide and oxygen contents, B., 268.
- and Kuzmin, L. L., viscosities of fuming and diluted sulphuric acid and sodium sulphide, A., 816. Preparation and properties of phosphorus nitride, A., 1090.
- See also Kuzmin, L. L.
- Postnovski, J. J., and Lugovkin, B. P., oxidation of organic substances with selenium dioxide, A., 852.
- Pot, A. W. See Tasman, A.
- Potamian, E. See Chaborski, G. L.
- Potapov, A. I., tyrosinase of tea-leaves, and its probable rôle in tea manufacture, A., 532.
- Potapov, P. P. See Burkser, E. S.
- Potel, P., action of small quantities of chemicals on plastic properties of flour pastes, B., 475. Importance of reducing power of wheat and flour in evaluation of quality, B., 475.
- and Chamuade, R., oxidation-reduction potentials of flours, B., 872.
- Potencier, R. See "Vitamina" Soc. Anon.
- Potick, D. See Houssay, B. A.
- Potjewijd, T., spontaneous decomposition of ammonium chlorate, B., 186.
- Potolovski, L. A., and Anfinogenov, P. Z., use of vapour-phase cracked gases for welding and cutting metal, B., 153.
- Potonié, R., petrographical investigation of lignite, petroleum, etc., A., 191.
- Potop, A., thermal conductivity of small bars of metals, B., 729.
- Potop, I., acid-soluble, mineral, and ultrafilterable phosphorus of the blood, A., 1393.
- Potschinok, C. N., fractional detection of potassium, A., 1093.
- Pottenger, C. H. See Clarke, B. L.
- Pottenger, F. M., proliferative and exudative tuberculosis with reference to their relationship to the fractions derived from the tubercle bacillus, A., 386.
- Potter, H. See Kohler, E. P.
- Potter, K. S. See Johnston, R.
- Potter, M. C., chemical actions taking place in the fermentation (organic) cell, A., 1538.
- Potter, V. R., and Franke, K. W., effect of diet on blood-thionine of the albino rat, A., 642.
- See also Franke, K. W.
- Potthof, K. T., apparatus for plating, (P.), B., 858.
- Pottier, R., and Branden, F. van den, comparative toxicity of sodium and diethylamine derivatives of 3-acetamido-4-hydroxyphenylarsenic acid, A., 246.
- Potts, G., finger-and-toe disease (*Plasmodiophora brassicae*), B., 919.
- Potts, H. G. See Weitzel, C. F.
- Potts, J. C., and Rollefson, G. K., photo-synthesis of hydrogen chloride, A., 943.
- Potts, W. See Trimble, H. M.
- Potts, W. W. See Long, T. A.
- Pou, J. S., α -cellulose, (P.), B., 765.
- Poullain, H. See Schreus, H. T.
- Poulter, T. O., and Frazer, G. E., action of acids on zinc, A., 308.
- Poumay, A., *jun.*, theory and practice of cupola fusion, B., 593. Thermochemistry of the cupola furnace and its application in the study of fusion and overheating of cast iron, B., 593.
- Pound, A. W., and Pound, J. R., oxidation of cinnamaldehyde, A., 214.
- Pound, J. R., and Wilson, Allan M., system aniline-formic acid-water, A., 935.
- See also Pound, A. W.
- Pounder, D. W. See Internat. Latex Processes.
- Pourbaix, M., heterogeneous catalysis in gas reactions, reactions between gases and non-gaseous substances, and poisoning of catalysts, A., 711.
- Pouzergues, J., urinary elimination of bismuth after injection of bismuth preparations, A., 119.
- Povarin, G., and Menkin, I., different types of tanning and strength and firmness of leather, B., 468.
- Poverenna, E. I. See Eidelman, M. M.
- Poverman, R. See Brull, L.
- Povolotzkaja, K. L., therapeutic method of determining vitamin-C, A., 416. Antiscorbutic [in-]activity of a preparation of methylhornarcotine, A., 416.
- Bukin, V. N., Harder, L. A., and Makarova, M. M., fermented cabbage (sauerkraut) as source of the antiscorbutic vitamin, A., 417.
- See also Bukin, V. N., and Glazunov, M. F.
- Powch, G. S. See Nesmejanov, A. N.
- Powell, A. D. See Hall, G. F., and Hill, C. A.
- Powell, Alan R., Schoeller, W. R., and Jahn, C., analytical chemistry of tantalum, niobium, and their mineral associates. XXIX. Separation of tungsten from titanium, niobium, tantalum, and zirconium, A., 1217.
- Powell, Alfred R. See Koppers Co. of Delaware.
- Powell, D. W. See Harper, L. R.
- Powell, E. R., ceramic slabs, (P.), B., 407. Cellular ceramic building material, (P.), B., 407. Cellular ceramic [ware], (P.), B., 407.
- and Johns-Manville Corp., [thermal] insulating block, (P.), B., 578.
- Powell, G. See Sadler, A. M.
- Powell, H. M., and Wells, A. F., structure of cesium cobalt chloride (Cs_2CoCl_4), A., 570. Complex anion formation by trivalent elements: structure of cesium thallie ennechloride, A., 1060.
- See also Hume-Rothery, W.
- Powell, M. E., and Palmer, L. S., behaviour of caseinogenate sols: hysteresis-like phenomenon in the rennin coagulation of milk, A., 1267.
- Powelson, W. V. N., removal of water of crystallisation from crystals and solids, (P.), B., 258.
- Power, H. R., electric furnace employed in making air-diffusers [for aerating sewage], B., 527.
- and Carborundum Co., granular [abrasive] material, (P.), B., 851.
- Power, M. H. See Adams, M., Bollman J. L., and Keith, N. M.
- Power-Gas Corporation, Ltd., and Rambush, N. E., gas low in hydrocarbons, and approximating in composition to blue water-gas, from bituminous coal, lignite, peat, etc., B., (P.), 10.
- Powers, D. H., and Röhm & Haas Co., application to textiles of dinitro-compounds, (P.), B., 353.
- See also Du Pont de Nemours & Co., E. I.
- Powers, H. A., differentiation of Hawaiian lavas, A., 956.
- Powers, T. C., absorption of water by Portland cement paste during the hardening process, B., 805.
- Powers, W. L., and Bollen, W. B., chemical and biological nature of certain forest soils, B., 1156.
- See also Wursten, J. L.
- Pownall, W., and Silverstone, E. L., cellulose derivatives and regenerated cellulose in sheet form, (P.), B., 300.
- Powney, J., properties of detergent solutions. I. Influence of p_H on surface tension of soap solutions, A., 1458.
- Pozdena, L., dispersing action of sodium ions on soils, B., 71.
- Pozen, M. A., enzymes in brewing, B., 76.
- Pozhiltzeva, E. A. See Petrov, A. D.
- Pozin, M. E., determination of relative velocity of slaking of lime, B., 225. Acceleration of slaking of lime by aqueous electrolytes, B., 268.
- Poznanski, A. E. See Khitrik, S. I.
- Poznański, S., cause of formation of "milky spots" in viscose silk, B., 488.
- Pozner, I. E. See Fomin, S. V.
- Poznyak, I. V. See Velikovski, A. S.
- Pozzi, L. See Rondoni, P.
- Pozzi, M. See Florence, G.
- Pozzi-Escot, E., determination of rotenone in plants of the genus *Derris*, B., 973. Modified [Roark] method for determination of rotenone, B., 1023.
- Prakash, B. See Dunncliff, H. B.
- Prakash, S., clotting of blood. III. Indefinite fluidity of blood in body-vessels, and relation between setting time and syncrasis of blood clot, A., 881.
- Prakken, J. R., elimination of chlorine in skin diseases, A., 1009.
- Prang, W., improvement of taste and biological investigation of surface water, B., 784.
- Prange, C. H., and Austen Labs., Inc., cast metallic denture, (P.), B., 107.
- Prange, G., detection of butter fat in confectionery; changes in butter fat during baking, or due to admixture with egg substances, B., 874.
- Prangley, A. J. See Kinetic Elutriators.
- Pranke, E. J., and Grangers Manufg. Co., treatment of sodium calcium cyanide, (P.), B., 270. Cyanides, (P.), B., 899.
- Pranschke, A., and Schwieter, H. E., heat of solution of magnesium oxide in nitric acid, and of zinc oxide and silver oxide in hydrofluoric acid as dependent on concentration of acid; specific heat of hydrofluoric acid solutions, A., 935.
- Prasad, B., viscosity and molecular association, A., 438. Viscosity of dilute solutions of non-electrolytes, A., 1317.

- Prasad, C., and Jha, J. B., potentiometric determination of copper with sodium sulphide, A., 597.
- Prasad, M., and Dalal, P. H., X-ray investigation of crystals of *m*-azotoluene, A., 152, 921.
- and Kapadia, M. R., X-ray investigation of crystals of anthranilic acid, A., 687.
- Prasad, S. See Pal, R. K.
- Prashun, O. W. See Pool, M. L.
- Prasolov, L. I., Antipov-Karataev, I. N., and Philippova, V. N., soil formation on the Caucasian Black Sea coast, B., 964.
- and Rode, A. A., soils of the middle Ural forest steppes, B., 964.
- Prát, S., Hamáčeková, J., and Volko-Starohorský, J., Slovenian mineral springs and travertine, A., 841.
- Prater, A. N. See Lucas, H. J.
- Pratesi, P., sulphur derivatives of pyrroles, A., 627. Pyrrole-blues. I. Absorption spectra in visible light. II. Absorption spectra in the ultra-violet, A., 1134.
- See also Betti, M.
- Pratt, D. D., and Handley, R., incorporation of rubber with tar products, B., 790.
- Pratt, H. J. See Munch, J. C.
- Pratt, J. D., industrial gas masks, B., 207.
- Pratt, J. H., oil in boiler water, B., 529.
- See also Eklund, W. N.
- Pratt, Joseph H. See Handelsman, M. B.
- Pratt, J. P., human corpus luteum and progesterin, A., 791.
- Pratt, R. S., annealing of copper alloys, B., 500.
- Pratt, T. W., and Tatum, A. L., microcolorimeter, A., 1340.
- Pre Cote Corporation. See McConaughay, K. E.
- Prebluda, H. J. See Parks, W. G.
- Precious Metals Developing Co., Inc. See Bart, B.
- Preda, V. See Papilian, V.
- Prede, A. F. See Isgarischev, N. A.
- Preinerstorfer, F., [grating-dispersing-prism device for] colour photography, (P.), B., 1070.
- Preis, E. See Peskov, N.
- Preis, M. O. See Kliukvin, N. A.
- Preisach, F., magnetic investigations of separating power of iron-nickel crystals, A., 287.
- Preisler, D. B. See Preisler, P. W.
- Preisler, P. W., and Preisler, D. B., kinetics of formation of sulphonic acids from dithioacids. I. Oxidation of cystine to cysteic acid by thallic sulphate. II. Positive and negative catalytic effects of halides on oxidation of cystine to cysteic acid by thallic sulphate, A., 174.
- Preiss, S., textile photochemical investigations. II. Ultra-violet pattern dyeing of silk textiles, B., 669.
- See also Freytag, H.
- Preiss, W., action of cellulose filter-pads in cigarettes on nicotine content of the smoke, B., 653.
- Preiswerk, P., radioactivity excited by neutrons, A., 558.
- See also Curie, (Mme.) I.
- Prelog, V., and Blažek, Z., action of hydrobromic acid on tri- β -hydroxyethylamine and tetra- β -hydroxyethylammonium bromide, A., 71. Derivatives of *N*-phenylpiperazine, A., 358.
- and Štěpán, V., bis- β -halogenoethylamines. VII. Synthesis of *N*-mono-alkylated piperazines, A., 629.
- Premier Colloid Mills, Ltd. See China, F. J. E.
- Prener, S. See Saltler, L.
- Prentice, J. See Kerr, H. J.
- Prentice, T. K., modern metallurgical practice on the Witwatersrand, B., 552.
- Prentiss, S. S. See Seatchard, G.
- Preobrajensky, A. A. See Pleschitzer, A.
- Preobrashenski, A. M., influence of substances of the pilocarpine group (pilocarpine, arecoline, physostigmine) on alkali reserve and blood-sugar [of dogs], A., 641. Action of pilocarpine group on alkali reserve and blood-sugar, A., 1018.
- Preobrashenski, N. A., Poljakova, A. M., and Preobrashenski, V. A., alkaloids of jaborandi leaves. VI. Synthesis of *r*-homopilocarpic acid. VIII. Synthesis of *d*-homopilocarpic acid, A., 872.
- and Preobrashenski, V. A., alkaloids of jaborandi leaves. VII. Resolution of the unstable ethylparaconic (*r*-pilocarpic) acid into its optical antipodes, A., 872.
- Preobrashenski, V. A. See Preobrashenski, N. A.
- Préparation Industrielle des Combustibles, apparatus for dry-cleaning of coal and similar materials, (P.), B., 212.
- Prescher, A., reincorporation into fibres of textile materials of substances lost during processes of production, (P.), B., 59.
- Prescott, J. A., and Stephens, C. G., determination of lime requirements of soils in association with soil surveys, B., 164.
- Taylor, J. K., and Marshall, T. J., relationship between mechanical composition of soil and estimate of texture in the field, B., 243.
- Prescott, S. C. See Doelger, W. P.
- Present, R. D., two-quantum Σ -states of the hydrogen molecule, A., 423. Theory of $3\Sigma^+ \rightarrow 3\Sigma^-$ transitions in band spectra, A., 1183.
- See also Kemble, E. C.
- Prestage, A. J. See South Metropolitan Gas Co.
- Preston, E., diffusion of volatile materials into an inert gas stream, A., 695. Permeability of refractory materials to gases, B., 406.
- Holland, A. J., and Turner, W. E. S., brilliance exhibited by lead crystal glasses, B., 850.
- and Turner, W. E. S., decomposition of sodium carbonate, A., 48. Volatility of silica, A., 50. Volatilisation and constitution of glass, B., 725.
- See also Howes, H. W.
- Preston, F. W., chrome corundum, B., 149. Time factor in testing glassware, B., 767.
- Preston, G. D., and Bircumshaw, L. L., oxidation of metals. I. II. Copper, brass, aluminium-brass, aluminium-bronze, magnesium, and some magnesium alloys, A., 287, 1469.
- Preston, H. E., and Amer. Eng. Co., crusher [ash-pit], (P.), B., 3.
- Preston, J. F. See Cooper, E. A.
- Preston, J. S., magnesium oxychloride for photometer screens and test plates, A., 951.
- Preston, M. H., and Matthew, J. A., absorption of water by linen. I. Flax yarns. II. Fabrics, B., 142, 350.
- Preston, R. D. See Astbury, W. T.
- Preston, R. M., jelly manufacture, (P.), B., 477.
- Preter, E., addition elements in stainless steels, B., 634.
- See also Portevin, A.
- Prettre, M., surface influence on certain homogeneous reactions depending on linking mechanism, A., 827. Oxidation and ignition at hot surfaces, A., 1327.
- See also Guéron, J.
- Preuss, E., spectral analysis of tektites, A., 842.
- Preuss, W. See Hückel, W.
- Prévost, C., synthesis of one of the dihydroanthraquinols, A., 487. Iodo-silver benzoate complex [as] iodinating agent, A., 728. Electronic structure and valency, A., 1057.
- and Sommière, A., α -halogenoketones; α -chlorodibenzyl ketone, A., 1124.
- Prianishnikov, A. A., determination of active base of methyl ethyl and methyl propyl ketones, B., 663.
- Prianishnikov, D., decomposition of rock phosphate by root excretions of lupins, B., 566.
- Prianishnikov, N. D., and Leontovitch, V. A., action of sodium or silver on ketals of symmetrical dichloro- or dibromo-acetone, A., 1353.
- Přibíl, R. See Tomiček, O.
- Pribram, E. A., microchemical examination of blood-serum for detection of industrial poisoning, A., 120.
- Pribyl, E., silica content in the blood-serum of cattle, sheep, goats, and pigs, A., 1262.
- Prica, M., bactericidal action of colloidal solutions, A., 257.
- Price, C. W., spontaneous decomposition of lecithin, A., 772.
- Price, D., and Bogert, M. T., synthesis of methoxychalkones [methoxyphenyl styryl ketones] and methoxybenzylidene- β -coumaranones from methoxyacetophenones and nitrobenzaldehydes, A., 85.
- Dingwall, A., and Bogert, M. T., influence of chemical constitution on visible colour and other tinctorial properties in case of structurally related methoxychalkones [methoxyphenyl styryl ketones] and methoxybenzylidene- β -coumaranones, A., 86.
- Price, E. G. See Mauthe, J. L.
- Price, J., and Grisco-Russell Co., heat exchanger, (P.), B., 2.
- Price, J. B. See Danforth, C. H.
- Price, J. R. See Macbeth, A. K.
- Price, N. J., and Dooley, A., reduction of acidity of chamber [sulphuric acid] plant exit gases by an intermediate water-wash, B., 450.
- Price, R. H. See Standard Oil Co. of Indiana.
- Price, T. S., silver iodide and sensitivity, B., 878.
- Price, W. B., and Scovill Manufg. Co., copper alloys [resistant to sea-water corrosion], (P.), B., 680.
- Price, W. C., absorption spectra of acetylene and ethane in the far ultra-violet, A., 562. Far ultra-violet absorption spectra of formaldehyde and alkyl derivatives of H_2O and H_2S , A., 805. Far ultra-violet absorption spectra and ionisation potentials of the ethyl halides, A., 913.
- and Wood, R. W., far ultra-violet absorption spectra and ionisation potentials of benzene and deuterobenzene, A., 1189.
- See also Collins, G. B.

- Price, W. K., insecticide [for codling moths], (P.), B., 283.
- Price, W. V., and North, G. C., mechanical control of fat content of Swiss cheese, B., 874.
- Prichard, C. E. See Mathers, F. C.
- Prichotko, A., Ruhemann, M., and Federitenko, A., absorption spectrum of solid oxygen. I, A., 1291.
- Prickett, T. B. See Houdry Process Corp.
- Prideaux, E. B. R., diffusion potentials and mobilities of ionised gelatin; acid and neutral solutions, A., 300.
- and Limmer, B. G., corrosion of Portland cement by water, B., 1045.
- Priebe, K. See Beller, K.
- Pribsch, J. A., pressure variation of residual ionisation current in different gases, A., 283. Secondary effects of cosmic rays on the Hafelekarr (2300 m. above sea level), A., 911.
- Prier, P., protection of light metals [magnesium and aluminium] against corrosion, (P.), B., 680.
- Priest, W. S. See Soskin, S.
- Priestley, H., and Whiddington, R., doubly-excited helium atom, A., 799.
- Prigoshin, B., preparation of the leather substitute "prima," B., 863.
- Prik, E. M. See Drinberg, A. J.
- Prileshaeva, N., anti-Stokes fluorescence of aniline vapour, A., 1054.
- and Terenin, A., free radicals in photodissociation of gaseous metal alkyls, A., 1468.
- and Tschubarov, R., fluorescence and absorption spectra of simple aromatic amines, A., 1052.
- See also Terenin, A.
- Prill, E. A., Wenck, P. R., and Peterson, W. H., mould tissue. VI. Factors influencing amount and nature of fat produced by *Aspergillus fischeri*, A., 255.
- Prince, A. L., and Blair, A. W., effect of ammonium compounds on soil and crop, B., 245.
- See also Bender, C. B.
- Prindle, B., microbiology of textile fibres (cotton), B., 986.
- Pringsheim, E. G., growth-promoting substance in soil, A., 672.
- Pringsheim, H. See Ginsburg, (Mlle.) S.
- Pringsheim, P. See Duschinsky, F.
- Prins, E. C., and Lemmens, J. R., obtaining substances in purified condition by treatment with miscible liquids of different solvent power and volatility, (P.), B., 403.
- Prins, H. J., synthesis of polychloro-compounds with aluminium chloride. I. Condensation of chloroform with tetrachloroethylene, A., 470.
- and Engelhard, F. J. W., synthesis of polychloro-compounds with aluminium chloride. II. Reaction between chloroform and dichloroethylene, A., 605.
- Prins, J. A., structure of discontinuities in absorption of gases in the region 10—100 Å., A., 136. Angular variation of refractive index for X-rays, A., 150. X-Ray diffraction in ionic solutions, A., 162. Molecular arrangement and X-ray diffraction in ionic solutions, A., 443, 931. Radiation damping and width of X-ray lines, A., 556. Molecular arrangement in amorphous antimony, A., 919. Amorphous antimony, A., 1194.
- Prins, J. A., and Fonteyne, R., X-ray diffraction in long-chain aliphatic liquids, A., 921. X-Ray evidence on ionic arrangement in thorium nitrate solutions, A., 931.
- Prins, K., cleaning of coal, (P.), B., 890.
- See also Hebley, H. F.
- Pritchard, G. P. See Larsen, N. P.
- Pritchard, H. See Morgan, R. S.
- Pritchard, W. N. See Moose, J. E.
- Pritchett, L. C. See Hercules Powder Co.
- Pritham, G. H., and Anderson, A. K., determination of uric acid in human, bovine, and avian blood, A., 230.
- Pritzker, J., and Jungkunz, R., fruit and hawthorn seeds as coffee substitutes, B., 826. Tea-seed oil, B., 859.
- Procházka, R., determination of organic matter in [sewage] slumps and sludges, B., 1120.
- Prochobova, M. J. See London, E. S.
- Procofiel, M. See Gardner, D.
- Procopio, M., rapid detection and determination of cobalt in oils, B., 813.
- Procopio, S., depolarisation of light by colloidal solutions, crystalline precipitates, and solid deposits on glass, A., 1054.
- and Umansch, D., surface layers on iron demonstrated by the c.m.f. of the metal immersed in water, A., 826.
- Procter, R. C. See Brody, S.
- Procter & Gamble Co., fatty esters [glycerides], (P.), B., 139, 194. Candle manufacture, (P.), B., 365. Plastic shortening agents, (P.), B., 522. Plastic shortenings, (P.), B., 522. Baked goods containing sugar, (P.), B., 522. Edible fats and fatty oils, (P.), B., 597.
- See also Alderks, O. H., and Hall, T. E.
- Procter-Smith, H. See Grant, J.
- Proctor, B. E. See Nickerson, J. T. R.
- Proctor, C. P. See Morrow, J. B.
- Proctor & Schwartz, Inc., dryers [for cloth, paper, etc.], (P.), B., 224.
- See also Roberts, J.
- Prodinger, W. See Dworzak, R.
- Producteurs de Sucre d'Érable de Québec. See Lund, A. A.
- Proebsting, E. L., fertiliser trial with Bartlett pears, B., 422.
- Proescher, F. See Tainter, M. L.
- Proferansowa, M. N. See Schapiro, E.
- Prohl, V. See under Briske & Pohl.
- Proisl, J. See Abel, E.
- Prokhorov, F. E. See Kostrikin, Y. M.
- Prokofiev, V. K., anomalous dispersion in potassium vapour at high temperatures, A., 684.
- and Shtandel, G., anomalous dispersion near the first two doublets of the principal series of rubidium and caesium, A., 684.
- Prokopenko, J. N. See Teleshkin, N. A.
- Prokopetz, E. I., and Jeru, I. I., hydrogenation of naphthalene, B., 795.
- Prokovieva, E. See Demjanovski, S.
- Pronin, M. E., dispersion coefficient of soil in the profile under different conditions of culture, B., 36. Behaviour of ferrous iron in normal soils, B., 37.
- Pronina, I. Z. See Mischtschenko, K. P.
- Prosch, W., colloid chemical researches on soaps, A., 163. Colloid-chemical basis of detergents and washing, B., 508. Colloid-chemical foundations of detergents and detergency, B., 774.
- Proschtschin, I. V. See Scharopova, A. V.
- Proskuriakov, N., and Temerin, S., rapid determination of ash in flour, B., 475. Phosphorus in wheat and its determination, B., 1018.
- and Tishina, A., proteins in wheat and the bread-baking qualities, B., 475.
- Proskurnin, M., and Frumkin, A., new determination of capacity of the electrical double layer, A., 298.
- Proskurnina, N. See Orékhov, A.
- Prozorovskaja, A. A. See Blagovetschenski, A. V.
- Prost, M., radiation accompanying dehydration of quinine sulphate, A., 1055.
- Prot, M., and Goldovsky, (Mlle.) M., indices of corrosion, B., 231. Homogeneity of light alloys by means of coloured indicators, B., 232.
- Protas, I. R. See Gorochevski, G. N., and Ljailkov, K. S.
- Prouty, C. C., fermentation of proteins in cream, B., 1066. Developments in chemical sterilisation [of dairy equipment], B., 1066. Detection of mastitis milk, B., 1066.
- and Olson, R. T., use of sodium thiosulphate dilution blanks in determining the germicidal efficiency of chlorine sterilisers, B., 927.
- Provasoli, L. See Lvov, A.
- Provoost, J., bleaching and catalysis defects of flax. I. Flax at different stages; the flax stem; retting of flax, B., 844.
- Prowse, I. B. See Knox, M. A.
- Prozorovskaja, L. L., and Shviriga, A. N., vitamin-A and -C contents of brown algae, A., 414.
- Pruckner, F. See Plaut, F.
- Prudhomme, R. O., effect of p_H on the lysis [by nucleic acids] of tubercle bacilli, A., 664. Different indicators replacing melanin in the Henry reaction, A., 1149. Fixation of methylene-blue *in vivo* by leprosy bacilli, A., 1283. Resistance of Stéfansky's bacillus to ultra-violet light, A., 1283.
- See also Chorine, V.
- Prüfer, H., and Dulik, K., light-sensitive layer, (P.), B., 382.
- Prüssing, C. See Krauss, F.
- Pruett, G. L. See Ober, B.
- Prundeanu, I. I., purification and preservation of sodium and potassium in the silvery state, A., 944.
- See also Longinescu, G. G.
- Prunell, A., effect of hyperglobulinæmia on Wassermann and Kahn reactions, A., 109. Relation between serum-polypeptides in general paralysis and the Wassermann and Kahn reactions, A., 644. Polypeptidorachia in general paralysis; cytopolypeptidic dissociation, A., 776.
- and Galmes, J., changes in serum-proteins in general paralysis and correlations with serological reactions, A., 109.
- Prunty, F. T. G., and Roscoe, M. H., suggested relation between cystine and vitamin-B₂, A., 1546.
- Prushanskaja, E. M., salt selection of bacteria in soil, B., 324.
- Prupton, C. F., Brosheer, J. C., and Maron, S. H., system $NH_4Cl-NH_4NO_3-H_2O$ at 0.4°, 25°, and 50°, A., 1323.
- and Lubri-Zol Corp., method of lubricating and reducing friction, (P.), B., 1128. Lubricant, (P.), B., 1128.

- Prutton, C. F., and Maron, S. H., kinetics of hypobromite decomposition, A., 1327.
- Maron, S. H., and Unger, E. D., hydrated alumina, A., 582.
See also Dow Chem. Co.
- Pryce, M. H. L., commutating co-ordinates in the new field theory, A., 912.
- Pryde, D. R. See Imperial Chem. Industries.
- Pryde, J., structure and physiological activity, A., 792.
- Pryor, E. K., Sullivan, J. D., and Oldright, G. L., leaching copper ores: oxidation of iron solutions used as a solvent, B., 499.
- Prytherch, H. F., rôle of copper in setting, metamorphosis, and distribution of the American oyster, *Ostrea virginica*, A., 119.
- Prytherch, J. C. See Macnaughtan, D. J.
- Prytherch, W. E., alloys of magnesium. II. Mechanical properties of wrought magnesium alloys, B., 552.
- Przibram, K., fluorescence of fluorite and bivalent europium ion, A., 282.
- Przybyszewska, K. See Szper, J.
- Przylecki, S. J. von, mechanism of action of enzymes, A., 400.
- Andrzejewski, H., and Mystkowski, E. M., polysaccharoprotein sols, A., 933.
- and Filipowicz, B., degradation of glycogen in muscle. II. Effect of muscle compounds on activity of amylase. III. Action of amylase in presence of myosin, A., 249.
- Giedroyc, W., and Rafalowska, H., state of glycogen in the interior of the cell. I. Three-component system from clupein, nucleic acid, and glycogen or dextrin, A., 1523.
- and Majmin, R., polysaccharoelupeins, A., 882. Compounds between muscle-proteins and dextrans. IV. Polysaccharoproteins, A., 882. Simplexes of lecithin with polysaccharides, A., 1481.
- and Rafalowska, H., chemical groups of protein which possess affinity for polysaccharides; experiments with organic solvents, A., 882. Dextrinoguanidine, A., 882. Chemical groups of protein which possess affinity for polysaccharides. IV. Rôle of tyrosine, A., 1390.
- Przyszczykowski, A. See Glixelli, S.
- Pšenička, E., divided measuring tank for diffusion juice, B., 75.
- Plaszek, L., presence of testicle hormones in blood, A., 1032.
- Pütsin, B. B. See Grünberg, A. A.
- Ptschelin, V. A., sols of emeraldine. I. Chemical nature, preparation, and properties, A., 580.
See also Sokolov, S. I.
- Puche, F., thermal decomposition of palladium chloride and chloro-salts, A., 703.
See also Gire, G.
- Pucher, G. W., Vickery, H. B., and Leavenworth, C. S., determination of ammonia- and amide-nitrogen in plant-tissue, A., 906.
See also Vickery, H. B.
- Puchkovski, B., and Strukova, E., determination of stability and type of emulsions, A., 297.
- Pudan, H. W., rock sizing and crushing machine, (P.), B., 786.
- Puddephat, S. M. See Allen, N. P.
- Püngel, W., Lieberknecht, K., and Schulz, E. H., changes in properties of steel wire on storage at room temperature or below, B., 310.
See also Bühler, H., and Kayseler, H.
- Puening, F., and Kretz, T., heating walls with internal heating flues for low-temperature carbonising ovens, (P.), B., 439.
- Puffer, E. L., colour in papermaking, B., 143.
- Pugh, A. J., laws of soil colloidal behaviour. III. Colloidal phosphates, B., 36.
See also Mattson, S.
- Pugh, L. P., sewage; is it a source of poisoning in animals? I. Clinical aspect, B., 1168.
- Pugh, W. P., Perrin process of steelmaking, B., 498.
- Pugsley, A. T., Oddie, T. H., and Eddy, C. E., action of X-rays on certain bacteria, A., 1170.
- Pugsley, L. I., effect of thyrotropic hormone on serum-cholesterol, A., 541. Effect of 2:4-dinitrophenol on calcium, creatine, and creatinine excretion in the rat, A., 1412.
See also Andreev, L., and Collip, J. B.
- Puilkov, A. N., adsorbing power of manganese for ionium, A., 28. Preparation of standard solutions of thorium chloride and its disintegration products, A., 50.
- Pukirev, A. G., and Maslova, M. S., β -methylumbelliferone, a fluorescing indicator, A., 316.
- Pulcher, C. See Margaria, R.
- Pulewka, P., and Grevenner, H., absorptive action of aconitine ointments; biological detection and determination of aconitine, A., 119.
- Pulewka, W. See Roll, F.
- Pullinen, E. See Routala, O.
- Pummerer, R., Guyot, O., and Birkofer, L., formation of levulic acid from hexoses. II. Hydroxyl-free substance resembling glucosan, A., 607.
- Pumphrey, R. J., electrical properties of isolated frog skin, A., 771.
- Pungs, W., Eisenmann, K., and Unyte Corp., condensation process yielding artificial masses of urea-formaldehyde type, (P.), B., 467.
- Jahrstorfer, M., Hellthaler, T., and Riebeck'sche Montanwerke A.-G., A., treatment [bleaching] of montan wax, (P.), B., 1127.
- Puntambekar, S. V., and Krishna, S., Indian acorn oils, A., 267. *Actinodaphne* fat as a parent material for a new detergent, B., 30.
- Pupp, W., oscillographic test measurements with moving layers of the positive column of rare gases, A., 272.
- Purcell, C. S., lead number [of vanilla], B., 123.
- Purcell, E. M. See Lark-Horovitz, K.
- Purell, R. H. See Emeléus, H. J., and Pearson, T. G.
- Purdie, D. See McCombie, H., and Mann, F. G.
- Purdon, A. O., cement, mortars, and concretes, (P.), B., 632.
- Purdue Research Foundation. See Brewer, P. H., and Hass, H. B.
- Purdy, W. C., results of algal activity [in water], B., 1071.
- Pure Calcium Products Co., and Stevens, A. H., treated pigments or fillers for rubber mixes, plastics, paints, etc., (P.), B., 860.
- Pure Oil Co. See Osterstrom, R. C., and Wagner, C. R.
- Purer, E. A. See Cannon, W. A.
- Puri, A. N., ammonium carbonate method of dispersing soils for mechanical analysis, B., 565. Determination of exchangeable bases in soils, B., 965. Determination of replaceable sodium and potassium, exchange capacity, and degree of alkalisation in alkali soils by ammonium carbonate extraction, B., 1108.
- Puritan Soap Co. See Fulton, R. R.
- Purr, A., reversible inactivation of papain and cathepsin, A., 252. Activation phenomena of papain and cathepsin, A., 252.
and Russel, M., activation of papain, applied to the determination of physiologically active substances in blood, A., 123.
- Pursell, W. See Rule, H. G.
- Purves, G. T. See Wellman Smith Owen Eng. Corp.
- Purves, H. D. See Hercus, C. E.
- Purvis, O. N., influence of temperature during germination on subsequent development of winter cereals and its relation to effect of length of day, A., 132.
- Pusch, F., adsorption of *Digitalis* glucosides and strophanthin on various substances in presence and absence of proteins, A., 527.
See also Lendle, L.
- Pusenkin, E. S. See Dain, B. J.
- Pushin, N., Popovic, B., Nikolic, R., and Živadinović, R., properties of pentaerythritol tetranitrate, B., 334.
and Rikovski, I. I., molecular compounds of trichloroacetic acid with alcohols, phenols, and ethers, A., 606.
and Sladović, L., phase diagrams of organic binary systems. XXII, A., 703.
- Putilova, I. N., lyophilic colloids. V. Solution of gelatin and stability of its sols, A., 701.
See also Liepatov, S. M.
- Putman, T. J. See Salter, W. T.
- Putnam, H. W., Blish, M. J., and Sandstedt, R. M., factors affecting maltose values in the ferricyanide method for diastatic activity [of wheat flours], B., 1114.
- Putnam, J. F. See Standard Oil Co. of California.
- Putochin, N. I. See Demjanov, N. J.
- Putschkovski, B. S., application of gold hydrosol to study of colloid-chemical properties of meat, B., 285.
- Putzeys, P., and Brosteaux, J., scattering of light in protein solutions, A., 1302.
- Puxeddu, E., conversion of open-chain molecules into cyclic compounds, A., 203. Functional groups and linkings in organic chemistry, A., 469.
- Puyal, J. See Collazo, J. A.
- Puzhov, V. See Temkin, M.
- Puzireva, V. P. See Terentiev, A. P.
- Pyhrr, W. A. See Swann, S., jun.
- Pyke, M. S., colorimetric method for quantitative measurement of rancidity, B., 1003.
- Pyke, M. A. See Bourne, M. C.
- Pyla, G. R. See Carpenter, L. V.
- Pyman, F. L., some lines of chemotherapeutic research, B., 748.
See also Boots Pure Drug Co., Easson, A. P. T., and Garforth, B.
- Pyne, G. T., simple titrimetric determination of milk phosphates, B., 873.
See also Ryan, J. J.

- Pyott, W. T., Jackson, C. A., and Huntington, R. L., factors affecting entrainment in bubble-cap columns, B., 753.
- Pyriki, C., nicotine in cigarette smoke. IV., B., 174. Carbohydrates of tobacco and their significance, B., 381. Concentration of nicotine in cigarette ends, B., 924.
- Pyroxylin Products, Inc. See Trolander, E. W.
- Pyzel, D. See Shell Development Co.
- Pyzel, F. M. See Bataafsche Petroleum Maats., and Shell Development Co.
- Pyzel, R. See Universal Oil Products Co.

Q.

- Quaccia, L., semichon process of fermentation, B., 474.
- Quackenbush, F. W. See Thomas, B. H.
- Quain, J. R., and Harrison, H., apparatus for ozonizing and sterilising, (P.), B., 108.
- Quandel, K. See Royen, H. J. van.
- Quanjier, H. M., fungicides and insecticides and foodstuffs treated therewith, B., 74.
- Quarles, L. R., relation between the electron field emission and the work function of liquid mercury, A., 1184.
- Quarrell, A. G. See Finch, G. I.
- Quartaroli, See Delavigne, L.
- Quartaroli, A., dynamic factor in the theory of mineral nutrition of plants, A., 670. Determination of soluble calcium and magnesium in soil, B., 37.
- Quast, A. See Ruska, H.
- Quastel, J. H. See Jowett, M.
- Quatram, F. See Stackelberg, M. von.
- Quayle, H. J., effect of temperature and humidity on fumigation for red scale, B., 246.
- and Ebeling, W., spray-fumigation treatment for resistant red scale on lemons, B., 375.
- and Rohrbaugh, P. W., temperature and humidity in relation to hydrocyanic acid fumigation for red scale, B., 327.
- See also Haas, A. R. C.
- Quadrat-i-Khuda, M., multiplanar cyclohexane rings, A., 1236.
- Quelle, H. J. See Terwen, A. J. L.
- Quensel, W., and Wachholder, K., determination of oxidised and reduced glutathione content of tissue, A., 511.
- See also Wachholder, K.
- Querido, A., influence of vitamin-D on p_H of faeces, A., 547. Influence of the calcium and phosphorus contents of diet on vitamin-D requirements, A., 1431.
- Quibell, T. H. II. See Mills, W. H.
- Quick, A. J., effect of exercise on excretion of uric acid; effect of benzoic acid on uric acid elimination in liver diseases, A., 1007.
- Quick, G. W., atmospheric exposure tests on non-ferrous screen wire cloth, B., 855.
- Quick, J. D., and Mack, G. F., setting of [wet] hides [or leather], (P.), B., 1106.
- Quiggle, D., Tongberg, C. O., and Fenske, M. R., apparatus for b.p. and boiling range measurements, A., 57.
- See also Fenske, M. R., and Tongberg C. O.
- Quigley Co., Inc., refractory materials and bodies [e.g., linings for open-hearth furnaces], (P.), B., 950.
- Quilico, A., and Justoni, R., carbonitrosohydrazines. III. Hydrazo- and azohydroxamic acids, A., 855.

- Quillard, composition of standard sea-water and influence of composition and replenishment of corrosive medium in corrosion tests, B., 231.
- Quimba, G. P. See Perkins, G. W.
- Quimby, E. H., Lucas, C. D., and MacComb, W. S., back scatter for several qualities of X-rays, A., 811.
- Quin, J. I. See Rimington, C.
- Quinet, (Mlle.) M. L., magnesium methoxides, A., 966.
- See also Olmer, L. J.
- Quinn, E. J. See Bessey, O. A.
- Quinn, J. L. See Wolfrom, M. L.
- Quinn, R. G. See Kraft, Ltd., G.
- Quinn, T. W., and Atlantic Refining Co., removal of wax from oil, (P.), B., 346.
- Quint, F. See Dilthey, W.
- Quintero, L. See Guzmán, J.
- Quintin, (Mlle.) M., application of the Debye theory to solutions of cadmium chloride, A., 824. E.m.f. of cadmium chloride cells, A., 826. Heat of dilution of cadmium chloride, A., 1462.
- Quirk, A. L., and Kock, G. D., sonic interferometer for study of absorption in liquids, A., 320.
- Quirke, T. T. See Pearce, D. W.
- Qureshi, M., and Effendi, N. H., reduction of carbonic acid by means of nascent hydrogen, A., 833.
- Qviller, B. See Langseth, A.

R.

- "R.C.W." Co. See Ramsey, J. C.
- Raab, W., blood-fat and blood-fat reaction in obesity, A., 517.
- Raad, M. See Chodát, F.
- Raadsveld, C. W., iodometric determination of zinc by Lang's method, A., 1473.
- Raalte, A. van, and Malotaux, R. M. N. A., temperature inside loaves [rolls, and cakes], B., 604.
- Rabald, E., constructional materials [in chemical works]; [metals and alloys], B., 554.
- Rabanowska, A. See Dmochowski, A.
- Rabanus. See Liese.
- Rabanus, A., present position of wood preservation, B., 1045.
- Rabaté, H., granulometric composition of pigments, B., 913.
- Rabaté, J., biochemistry of *Salix*. V. Relationship of salipurposide to naringoside and isohesperidoside. VI. *Salix nigricans*, Sm. VII. *Salix repens*, L. VIII. Distribution of glucosides in the *Salicaceae*. IX. Physiological study of the glucosides. X. Leaf enzymes of *S. purpurea*. XI. Hydrolysis of salicoside by leaf enzyme preparation. XII. Oxidation of salicoside by leaf enzyme preparation, A., 796, 906, 1042.
- See also Charaux, C., and Ramart-Lucas, (Mme.) P.
- Rabaté, S. G., Macé, A., and Clement, J., pure hydratopectin, (P.), B., 972.
- Rabbeno, A., and Ruffini, V., comparative effects of anaesthetics on the isolated nervous system of the frog (*Rana esculenta*), A., 118.
- Rabboni, F., blood-amino-acid level after resection of the colon, A., 1261.
- Rabe, reserving wool in dyeing cotton-wool mixture fabrics, B., 144.

- Rabe, P., Haeuszler, H., and Hochstätter, W., *Cinchona* alkaloids. XXIX. Stereochemical investigations. IV. Hydrocinchonine of H. Emde and epicinchonine of J. Suszko and A. Tomanek, A., 99.
- Rabek, T. See Bojanowski, J.
- Rabetrano, E., oleo-emulsion of graphite, (P.), B., 583.
- Rabi, I. I., effective neutron collision radius, A., 7. New kinetic theory of gases, A., 1313.
- See also Rosin, S.
- Rabinerson, A., viscosimetric investigations of structure formation in $\text{Fe}(\text{OH})_3$ sols. I. Sols containing electrolyte. II. Influence of warming, A., 700, 1073. Influence of alcohols on structure formation in ferric hydroxide sols, A., 1074.
- and Schumann, G., viscosimetric investigations of structure formation in vanadium pentoxide sols. II. Influence of heating, A., 700.
- Rabinovitch, A. J., Bokinik, Y. I., and Ridiger, T. B., adsorption of optical sensitizers for silver salts, A., 697.
- and Kargin, V. A., are lyophobic colloids colloidal electrolytes? A., 298.
- and Titov, A. A., nature of photographically active gelatins, B., 574.
- See also Kargin, V. A.
- Rabinovitch, A. M., and Avakova, E. S., determination of colour and light-sensitivity of paraffin wax, B., 133.
- Rabinovitch, E., and Lehmann, H. L., kinetics of recombination of bromine atoms, A., 586.
- Rabinovitch, I. M., Corcoran, A. C., Davidson, J. A., and Rhea, L. J., bactericidal properties of sodium formaldehydesulphoxylate *in vivo*, A., 900.
- Rabinovitch, M. See Orékhov, A.
- Rabinovitch, M. S. See Aschkinazi, J. B.
- Rabinovitch, R. V. See Rozenberger, N. A.
- Rabinovitch, T., resistance of lubricating oils to pressure, B., 889.
- Rabinowicz, M. See Giroud, A.
- Rabkina, G. S. See Gehelin, A. A.
- Rabl, M., calculation of capacity of the lead accumulator, B., 315.
- Rabschinski, I. V., and Menkovski, M. A., sulphur and sulphuric acid, B., 849.
- Rabussier, H. See Rangier, M.
- Raby, E. C. See Bartholomew, E. T.
- Racah, G., empirical stability limits of atomic nuclei, A., 560. Origin of positive electrons, A., 801. Production of electron pairs, A., 1294.
- Racciu, G., action of β -aminoethyl alcohol on 2:4:5-trinitrotoluene, A., 613.
- See also Garelli, F.
- Race, J. See Griffiths, G. J.
- Rachad, A. M., fowl plague in Egypt, B., 375.
- Rachele, J. R. See Benedetti-Pichler, A. A.
- Rackmann, K., relationships between plant growth, soil, and the nutrient ratios of manures. I, B., 1109.
- Radamus, Brazilian vegetable fibres for paper-making, B., 1136.
- Radcliffe, J., fertilisers, (P.), B., 248, 568.
- Radeff, C., activity of mineral substances in low-temperature coking of coal, B., 1079.
- Rademacher, A., and Sauerwald, F., measurement of internal friction of metals, B., 637.
- Radenhausen, R. See Mumm, O.
- Rader, L. F., jun. See Marshall, H. L., and Reynolds, D. S.

- Radio-Akt.-Ges., Loewe, D. S., and Schlesinger, K., fluorescent screens, more particularly for Braun tubes, (P.), B., 812.
- Radio Corporation of America. See De Boer, J. H., Gessel, K. M. van, and Jacobus, R. A.
- Radiochemisches Forschungsinstitut G.m.b.H., compositions of fuel oil and powdered coal, (P.), B., 55.
- Radmanèche, R., influence of temperature on electrical conductivity of quartz, A., 1196.
- Radtchenko, O. A. See Orlov, N. A.
- Radu, I. F., saturation condition of soils, B., 865. Influence of fertilisers on reaction of soils, B., 866.
- Radulesco, G. See Vellinger, E.
- Rădulescu, D., structure and properties of organic chromophores and group-resonators. XVII. Influence of substituents on absorption bands, A., 1302. and Alexa, V., structure and properties of organic chromophores and group-resonators. XVIII. Relation of frequency of absorption bands in the vapour state; absorption bands of benzoquinone vapour. XIX. Physical interpretation of frequency relation between the bands; relation between absorption bands and fluorescence bands of the same substance. XX. Coloured nitro- and polynitro-derivatives of benzene, A., 1302. and Bărbulescu, F., structure and properties of organic chromophores and group-resonators. XVI. Quantitative law of frequency of absorption band maxima of group-resonators, A., 1302. and Drăgulescu, C., general connexion between frequencies of band spectra of aromatic hydrocarbons and their derivatives, A., 280. Structure and properties of organic chromophores and group-resonators. XV. Theory of fluorescence of organic substances, A., 1302. and Popa, S., structure and properties of organic chromophores and group-resonators. XXI. The hydrogen of the benzene nucleus can, under certain conditions of polarity, become ionisable and be replaced by metals, A., 1302. and Zamfirescu, G., velocity of thermal decomposition of chloropierin, A., 1464.
- Raduner & Co., Akt.-Ges., dressing of fabrics, (P.), B., 627.
- Rae, J., colorimetric test for quillaia saponin, B., 253.
- Rädeker, W., corrosion of iron water-pipes, B., 1145.
- Raeder, M., micro-chemical analysis, A., 835.
- Raether, H., gas discharges in the cloud chamber, A., 801. See also Flegler, E.
- Raetzki, M. V. See Pantschenko, G. A.
- Rafalowska, H., Krasnodebski, J., and Mystkowski, E. M., chemical groups of proteins which possess affinity for polysaccharides. V. Silk fibroin and peptone, A., 1390. See also Przylecki, S. J. von.
- Rafalowski, S., nuclear moments of tellurium and selenium isotopes, A., 424.
- Raffaelli, D., detection of sorbitol in wines, B., 203.
- Raffeld, (Mme.) See Lobstein.
- Raffinerie Tirlemontoise Société Anonyme, automatic [optical] analyser-detector for liquids, (P.), B., 5. See also Bergé, J.
- Raffold Process Corporation. See Rafton, H. R.
- Raffy, A., and Fischer, P. H., influence of an oxygen atmosphere on the blood of *Helix pomatia*, A., 371. See also Dhéré, C.
- Rafilzon, I. A. See Kasanski, B. A.
- Rafton, H. R., and Raffold Process Corp., paper manufacture, (P.), B., 223, 897. Colloid mill and method of operation, (P.), B., 1075.
- Ragatz, E. G., propane total-heat curve, A., 815. See also Rebber, L. L., and Union Oil Co. of California.
- Raghavachari, T. N. S., and Iyer, P. V. S., use of activated carbon in purification of water in the tropics, B., 1168.
- Ragni, G. See Passerini, M.
- Ragno, M., and Frasti, S., additive compounds of alkali halides and organic bases, A., 48. and Vadala, L., influence of temperature on the formation of additive compounds, A., 1469. See also Scagliarini, G.
- Raha, P. K., and Chatterjee, S. D., influence of magnetic field on the coefficient of viscosity of liquids, A., 1198. See also Bose, D. M.
- Rahmel, H. A. See Bennett, R. D.
- Rahmer, H., and Strich, C., black printing inks, particularly newspaper inks, (P.), B., 367.
- Rai, H. S. See Mahal, H. S.
- Raiford, L. C., and Fox, D. E., condensation of vanillin substitution products with methylene derivatives, A., 1367. and Inman, G. O., carboaryloxy-radical in migration of acyl from nitrogen to oxygen in *o*-aminophenol derivatives, A., 1361. and McNulty, G. M., effect of substituents on formation of thiocarbanilides, A., 1360. and Milbery, J. E., bromination of benzoates of phenolic compounds, A., 207. and Oberst, F. W., replacement of the amino-group of aromatic amines by hydrogen, A., 1119. See also Gundy, G. Y.
- Raignier, A., simple and inexpensive thermoregulator, A., 187.
- Raigorodsika, R. L., and Binova, E. S., determination of salicylic acid, A., 877.
- Raigorodsky, P. M., and Petroleum Eng., Inc., recovering hydrocarbon vapours, (P.), B., 663.
- Raikhlin, Y. See Zarubin, N. M.
- Railston, W., and Richardson, F. G., effect on supersonic dispersion in gases of pressure, A., 1062.
- Railway Service & Supply Corporation. See Pearce, F. S.
- Rainbow Light, Inc. See Machlett, R. R.
- Raine, T. See Andrew, J. H.
- Raineau, A. See Audibert, E.
- Rainsford, A. E. See Hauser, C. R.
- Raisch, E., and Steger, H., permeability of building and heat-insulating materials to air, B., 852.
- Raisin, C. G. See Angus, W. R., and Ingold, C. K.
- Raistrick, A., correlation of coal seams by microspore content. I. Seams of Northumberland, B., 5.
- Raistrick, H., and Smith, George, biochemistry of micro-organisms. XLII. Metabolic products of *Aspergillus terreus*, Thom. Terrein, A., 662. See also Clutterbuck, P. W., Haworth, W. N., Imperial Chem. Industries, and Oxford, A. B.
- Raitt, R. W. See Evans, R. D., and Langer, R. M.
- Raiz, O. See Ermolaev, A.
- Raiziss, G. W., and Abbott Laboratories, mercury compound[s] of nitro-*o*-cresols, (P.), B., 175. Halide-mercuri-nitrocresols [pharmaceuticals], (P.), B., 655. Mercury derivatives of nitro-*p*-cresols [bactericides], (P.), B., 1165.
- Severac, M., and Kremens, A., chemotherapy of syphilis and other infectious diseases. I. Experimental chemotherapy of preparation No. 1717, formaldehydesulphoxylate of 3-amino-4-hydroxyphenylarsinic acid, A., 109.
- Rajagopal, S., and Iyengar, A. V. V., extraction of sap from plant tissues, A., 674.
- Rajagopalan, R. See Iyer, C. R. H.
- Rajchinshtein, C., and Korobov, N., rapid determination of tungsten, A., 951. See also Shukov, I. I.
- Rajderkar, B. B. See Paranjpe, G. R.
- Rajmann, E. See Feigl, F.
- Rakieten, N., Himwich, H. E., and Du Bois, D., morphine acidosis, A., 246. See also Himwich, H. E.
- Rakovski, E. V., bituminous shale as fuel in industry in connexion with its composition, B., 1028. and Poljakov, T. M., determination of humic acids in peat, B., 52. and Suiskov, K. I., smoky coals from the Moscow basin, B., 436.
- Rakovski, V. E., and Balaschov, E. F., acid treatment of crude tars. I. Acid sludges, B., 438. Acid treatment of peat tar. II. Behaviour of the acid components of the tar in the acid treatment, B., 438. and Joffe, P. M., phenoxide method of extracting phenols from acidic tar oils, B., 437. and Rubin, S. I., gasoline method of separating solid bitumens from primary tars, B., 53.
- Rakshit, J. N., density of water from various sources and isotopic ratio in hydrogen, A., 691.
- Rakshit, P. C. See Ghosh, J. C.
- Rakušan, B. See Křepelka, J. H.
- Rall, H. T. See Smith, H. M.
- Ralli, E. P., Flaum, G., and Banta, R., results of feeding lecithin and pancreas in depancreatised dogs on the liver-fat and its saponifiable and unsaponifiable fractions, A., 890. See also Brandaleone, H.
- Ralls, J. O., and Hammersley, W. H., hydrogenator, A., 1099.
- Ralski, E., intake of mineral substances by plants of the more important mountain pastures of the Western Carpathians in relation to manuring, B., 968. See also Wlodek, J.
- Ralston, A. W. See Standard Oil Development Co.
- Ralston, O. C., and King, C. R., diluting a flotation pulp, B., 953.

- Ralston, O. C., Klein, L., and United Verde Copper Co., recovery of selenium from copper matte, (P.), B., 227.
- and United Verde Copper Co., froth flotation, (P.), B., 506.
- Ram, A., origin of combined nitrogen in the atmosphere; analysis of tropical rain and its importance in agriculture, A., 953.
- Ram, S., corrosion of steel by sulphuric acid, B., 550.
- Ramage, G. R., and Simonsen, J. L., constitution of norcaryophyllenic acid, A., 489. Caryophyllenes. II, A., 756.
- See also Evans, W. C., Gratton, G. G., Lewis, H. J., and Penfold, A. R.
- Raman, C. V., origin of colours in plumage of birds, A., 233.
- Raman, K. S. V. See Varma, P. S.
- Ramanadham, M., anisotropy of optical polarisation field in liquids, A., 148.
- Principal optical polarisabilities of the naphthalene molecule, A., 565.
- Ramanathan, K. R., and Kelkar, V. N., convection currents in an unstable layer of fluid studied by optical methods, A., 807.
- and Ramdas, L. A., transparency of the atmosphere in the ultra-violet and possible means of extending the Solar spectrum in the regions 2200—2000 Å., A., 144.
- Ramart-Lucas, (Mme.) P., influence of cyclisation on colour of molecules, A., 82.
- and Hoch, J., colour changes accompanying cyclisation of aromatic hydrocarbons, ketones, and alcoholic and phenolic acids, A., 621.
- and Rabaté, J., structure of heterosides based on their ultra-violet absorption spectra, A., 1485.
- Ramaswami, M. N. See Guha, P. C.
- Ramaswamy, K. L., and Rao, G. G., density and compressibility of silicane and silicethane, A., 1455.
- Ramaswamy, S., X-ray study of effect of heat on structure of sputtered films of gold, A., 17. Scattering of light by thin metallic films, A., 288. X-Ray analysis of structure of iridescent shells, A., 1194.
- Ramayya, K. S., treatment of petroleum [acid] sludges, (P.), B., 89.
- Rambaeva, A. M. See Kireev, V. A.
- Rambaud, R., intramolecular transpositions. I. Influence of carboxyl, ester, and nitrile groups on allylic intramolecular transpositions. II. Preparation and study of α -hydroxyvinylacetic acid and its derivatives; experimental study of their normal reactions and normal reactions of isomeric γ -substituted crotonic acids. III. Abnormal reactions of α -substituted derivatives of vinylacetic acid, A., 63, 64. Action of sodium ethoxide on γ -halogenocrotonic esters, A., 1105.
- Rambaud, (Mme.). See Dupont, G.
- Rambauske, W. See Grottrian, W.
- Ramberg, E. See Kennard, E. H., and Richtmyer, F. K.
- Ramberg, L., and Hedlund, I., two optically active diastereomeric forms of α -phenylsulphoxypropionic acid, A., 970.
- Rambush, N. E. See Ashmore, Benson, Pease & Co., and Power-Gas Corp.
- Ramchandani, C. N. See Butler, J. A. F.
- Ramdas, L. A., and Katti, M. S., diurnal variation of moisture in [Indian] soil during the clear season, B., 777.
- Ramdas, L. A. See also Ramanathan, K. B.
- Ramirez, R. L. See Roffo, A. H.
- Rammler, E. See Rosin, P.
- Ramon, G., Nélis, P., and Richou, R., neutrality of flocculating staphylococcus toxin-antitoxin mixture, A., 1282.
- and Richou, R., determination of abrin and anti-abrin by a specific flocculation reaction, A., 1263. Antigenic power of staphylococcal toxin and anatoxin: its resistance to heat, A., 1519.
- Ramos, C. G. See Adriano, F. T.
- Rampal, C. L. See Yajnik, N. A.
- Ramsauer, C., artificially excited positrons, A., 425.
- Ramsay, J., continuously decorating brick, tile, etc., (P.), B., 101.
- Ramsbottom, J. M. See Thomas, B. H.
- Ramsburg, C. J. See Koppers Co. of Delaware.
- Ramsdell, L. S., system K_2SO_4 - $MgSO_4$ - $CaSO_4$, A., 1461.
- Ramser, H., and Krekeler, H., relation between degree of refining of motor oils and their behaviour in the engine, B., 86.
- Ramsey, J. C., Camblin, C., and "R.C.W." Co., amalgamation [process for recovering Au from ores], (P.), B., 505.
- Ramsey, R., and Warren, C. O., jun., oxygen consumption of rabbit red cells during lysis: oxygen consumption of plasma, A., 510.
- Ramsey, W. E., and Lipman, M. R., circuit for the analysis of Geiger-counter pulses, A., 722.
- Ramseyer, M. See Du Pan, R. M.
- Ramshorn, K., electrophysiological [plant] growth theory, A., 418.
- Rancaño, A. See Guzmán, J.
- Rand, C. See Dische, Z.
- Randaccio, C., and Bellavia, S., effect of gases and vapours on explosibility of CS_2 -air mixtures, A., 827.
- Randall, G. M., and Plastic Products Inc., surgical suture, (P.), B., 286.
- Randall, H. M., and Barker, E. F., infrared spectra of acetylene containing H^2 , A., 1300.
- Randall, J. T. See Gen. Electric Co.
- Randall, L. O. See Jordan, W. R.
- Randall, M., and Sarquis, M. N., micro-determination of lead; electrolytic-colorimetric method, A., 317.
- and Shaw, D. L., potassium lead sulphate, lead sulphate, potassium sulphate, and iodide ions at 25°, A., 583.
- Randall, R. H., and Webb, H. W., rate of change of electron temperature in the mercury afterglow, A., 1439.
- Randall, S. S. See Freeman, M., and Gulland, J. M.
- Randall, W. F. See Telegraph Construction & Maintenance Co.
- Randoin, L., nutrition and biochemical equilibrium in alimentary régime, A., 1154.
- Giroud, A., and Leblond, C. P., relation between the vitamin-C contents of various vegetable tissues and the presence or absence of chlorophyll, A., 1546.
- Randolph, D. W., alloys of nickel and barium, B., 232.
- Randolph, E. B., and Belvin, W. L., economic possibilities of pulping-timber growth of the Coastal Plain, B., 667.
- Randolph, H., toxin of *Bacillus proteus*, A., 255.
- Rane, M. B., and Apte, K. R., volumetric determination of chlorides and sulphates in a mixture containing both, with the help of an adsorption indicator, A., 835.
- Ranedo, J., detection and determination of nickel by means of dimethylglyoxime in presence of copper, A., 951.
- Ranganathan, S. K., attempts to produce uric acid calculi in albino rats, A., 518.
- See also Guha, P. C.
- Rangaswami, M., and Aldis, R. W., heat-curing of shellac. II. Depolymerisation, B., 33.
- Rangier, M., uric acid and urochrome in urine, A., 774. Solubility of uric acid in urine, A., 1525.
- and Rabussier, H., specific micro-determination of mercury in biological media, A., 1182.
- Rangwala, Y. I. See Jadhav, G. V.
- Rank, D. H., and Bordner, E. R., Raman spectra of molecules of the pentatomic type, A., 807.
- Bordner, E. R., and Larsen, K. D., Raman spectrum of neopentyl deuteroxide, A., 1446.
- See also Wood, R. W.
- Rankin, L. P. See Hercules Powder Co.
- Ranquist, R. C., influence of vagus nerves on sugar tolerance in dogs, A., 116.
- Ransley, C. E. See Smithells, C. J.
- Ranson, W. B., waterproof pavements, roofs, floors, etc., (P.), B., 806.
- Rao, A. V., rotational Raman effect in liquids, A., 146. Raman spectrum of carbon disulphide, A., 1190.
- See also Bhagavantam, S.
- Rao, B. S., and Subramanian, K. S., occurrence of furan derivatives in volatile oils, A., 134. 2:4:5-Trimethoxy-1-allylbenzene; asarone (allyl), A., 1041.
- See also Hegde, B. J., and Rao, M. R. A.
- Rao, B. V. R., examination of molecularly scattered light with a Fabry-Perot etalon. I. Liquid benzene. II. Liquids: toluene and carbon tetrachloride, A., 146, 565. Doppler effect in light scattered by liquids. I. Variation with temperature. II. Polarisation of the transversely scattered radiations, A., 1053, 1445.
- Rao, C. M. B., and Karim, M., absorption spectra of the halides of some elements of the second group: $CdCl_2$, $CdBr_2$, CdI_2 , $ZnCl_2$, $ZnBr_2$, and $SrCl_2$, A., 1299.
- and Samuel, R., absorption spectrum of some organic vapours, A., 913.
- See also Asundi, R. K.
- Rao, C. S. S., influence of dissolved electrolytes on constitution of water, A., 11. Constitution of water in solutions of electrolytes as studied by the Raman effect, A., 295. Raman effect of oxalic acid in different phases, A., 807. Constitution of water in solutions of weak electrolytes. I. Formic and acetic acids, A., 1058. Effect of change of temperature on constitution of water in solutions of electrolytes, A., 1201. Constitution of water in solutions of non-electrolytes. I. Acetone, A., 1445.
- See also Rao, I. R.
- Rao, D. A. R. R. See Norris, E. R.
- Rao, G. G., dissociation constant of eugenol, A., 823.
- See also Ramaswamy, K. L.
- Rao, I. R., and Rao, C. S. S., constitution of water in solutions, A., 569.

- Rao, K. A. N., and Janniah, S. L., utilisation of indigenous tanning materials. I. Tannin extract from avaram bark (*Cassia auriculata*, Linn.), B., 35.
See also Varadhan, C.
- Rao, K. R., and Krishnamurti, S. G., are spectrum of selenium, A., 137. Structure of Br III, A., 423.
See also Krishnamurti, S. G.
- Rao, L. G., open-pan system of white sugar manufacture, B., 39.
- Rao, M. M. R., and Jatkar, S. K. K., heats of transition of triglycerides, A., 1324.
- Rao, M. R. A., adsorptive property of silica gel. II. Adsorptive properties of silica gel containing residual hydrogen chloride. III. Volume changes produced on displacement of adsorbed liquids in silica gel by water. IV. Liberation of air from silica gel capillaries during adsorption of liquid. V. Sp. gr. of silica gel under various liquids, A., 1069. Selective adsorption and its significance. I. Nature of selective adsorption, A., 1070. Effect of temperature on selective adsorption by silica gel from binary mixtures, A., 1315.
- and Rao, B. S., adsorptive property of silica gel. I. Chemical activity of residual water in activated silica gel, A., 1069.
- Rao, M. S., esterification of phosphate in the respiratory breakdown of sugar in higher plants, A., 904.
- Rao, S. R., magnetism of tin, A., 19. Magnetism of copper, A., 1312. Diamagnetism of copper, A., 1453. Colloidalisation and cold-working of metals, B., 954.
- and Subramaniam, K. C., diamagnetism of thallium single crystals, A., 1197.
- and Varadachari, P. S., magnetic properties of organic vapours, A., 14. Hydrates and diamagnetism, A., 289.
- Rao, S. S. See Rau, M. A. G.
- Rao, S. V. See Krishnaswamy, P. R.
- Rao, U. S. K., and Manjunath, B. L., supposed occurrence of acids with uneven number of carbon atoms in vegetable oils and fats. II. Acid fraction of mean mol. wt. 354 from seeds of *Butea frondosa*, Roxb., A., 1550.
- Manjunath, B. L., and Menon, K. N., roots of *Aristolochia indica*, Linn. II. Essential oil, A., 1433.
- Rapatz, F., and Hummitch, W., transition structures in fusion welding with austenitic welding rods, B., 856.
- and Pollack, Hans, influence of primary crystallisation on properties of steels, B., 359.
- Rape, P. See Fox, A. S.
- Raper, H. S. See Linnell, L.
- Raper, R. See Clemo, G. R.
- Rapin, G., principles of manufacture of potassium permanganate, B., 543.
- Rapoport, I. B., and Bludov, A. P., methane synthesis, B., 1035.
- and Karzhev, V. I., low-temperature carbonisation of Lenin coals, B., 437.
- and Milovidova, N. V., gasolines obtained in destructive hydrogenation of sapromyxite tar, B., 53.
- Orechkin, D. B., and Chufarovski, V. N., destructive hydrogenation of coals, B., 85.
- Polozov, V. F., and Konov, V., destructive hydrogenation of tars, B., 790.
See also Karavaev, N. M.
- Rapoport, S. See Friedrich, F.
- Rapp, P., effect of calcium chloride on Portland cements and concretes, B., 769.
- Rappaport, B. Z., preservation of pollen extracts by drying and preparation of concentrated pollen solutions, A., 549.
- Reed, C. I., Hathaway, M. L., and Struck, H. C., treatment of hay fever and asthma with viosterol, A., 514.
- Rappaport, F., and Pistiner, R., volumetric determination of the nitrogen in 0.04—0.05 c.c. of blood (serum, plasma) without distillation, A., 1142.
- Rappaport, I. See Richards, D. W., jun.
- Rapport, D. See Canzanelli, A.
- Rapson, W. S., and Robinson, R., synthesis of substances related to sterols. II. Synthesis of substituted cyclohexenones, A., 1498.
- Robinson, R., and Hirt, R., synthesis of substances related to sterols. VII., A., 1496.
- Raseh, R., pulverising in chemical industry, B., 385. Hydraulic binding agents and their application, B., 631.
- Rasch, R. A. See Herty, C. II.
- Raschba, E. J. See Palladin, A. V.
- Rasehevsky, N. von, physico-mathematical aspects of conduction of nervous impulse, A., 115. Calculation of permeability of cell surface to oxygen, A., 238. Mechanism of division of small liquid systems. I. and II., A., 1073, 1318. Electrical charges of disperse systems forming the seats of physico-chemical reactions, A., 1318. Physico-mathematical theory of organic form, A., 1414. Physico-chemical theory of [nerve] excitation and inhibition, A., 1414.
- Raschig, M. See Kemmer, H.
- Raschig Ges.m.b.H., F., evaporation, distillation, or concentration of aqueous chloric acid solutions, (P.), B., 767.
- Raseja, S., micro-volumetric determination of sodium in blood, A., 1044.
- Rasetti, F., γ -rays due to absorption of slow neutrons, A., 1441.
See also Amaldi, E.
- Rask, O. S., determination of starch, B., 1015.
- Raskina, R. L., effect of treating cottonseed with gaseous hydrogen chloride on quality of the oil, B., 462.
See also Ardashev, B. I., Korsheniovski, G. A., and Sakostschikov, A. P.
- Rasmussen, E., hyperfine structure in the hafnium spectrum, A., 424.
See also Kopfermann, H.
- Rasmussen, K. E., and Linderström-Lang, K., clupein. II. Electrometric titration, A., 369.
- Raspopova, L. G. See Charukhina, Z. N.
- Rasquin, H., pigment problems in the paint industry, B., 366. Pigment or "adulterated pigment" for oil enamel manufacture, B., 1055.
- Rassweiler, G. M. See Withrow, L.
- Rast, K., determining mol. wt., A., 1476.
- Rastall, R. H., and Hemingway, J. E., petrography of the Blea Wyke Series, A., 954.
- Rasumov, A. I. See Arbusov, A. E.
- Rasumovski, V., electronic theory and organic chemistry. I. Valency; polarity; energy. II. Structure of open-chain unsaturated organic compounds, A., 431, 843.
- Raszeja, S., and Slawinski, A., distribution of chloride between plasma and blood-corpuscles in normal and laked blood, A., 374.
- Ratanarat, C. See Brintzinger, H.
- Ratelade, J. See Gautier, C.
- Raterink, H. R. See Somerville, I. C.
- Rathenau, G., photography in the far ultraviolet, B., 925.
- Rather, J. B., Beard, L. C., jun., Reiff, O. M., and Socony-Vacuum Corporation, distillate petroleum product and treatment of same, (P.), B., 181. Decolorised refined petroleum product and decolorising agent therefor, (P.), B., 181. Treating [decolorising and stabilising] petroleum distillate, (P.), B., 217.
- Rathert, F., importance of electro-filters in the working of modern pulverised-fuel boilers, B., 705.
- Rathert, K. See Zipf, K.
- Rathery, F., and Bertoliatti, J., blood-potassium in different forms of diabetes mellitus, A., 236, 516.
and Cosmulesco, I., changes in protein-bound sugar in diabetes following simultaneous or separate administration of glucose and insulin, A., 515.
- Cosmulesco, I., and Grignon, C. E., effect of spleen extracts in diabetes, A., 515.
- De Traversé, P., and Farley, V., hyperglycaemia provoked in nephritics, A., 1010.
- Wolff, R., and Manjean, S., effect of arsenic therapy on nitrogen and carbohydrate metabolism, A., 657.
- Rathgeber, F., Schulz, Walter, Beplate, V., Ruesch, A., and North American Rayon Corp., wet-treatment of spinning cakes, etc., (P.), B., 1138.
- Rathsack, K. See Opitz, K.
- Ratia, V. R. T., and Urizar, P. F., bactericidal bodies for sterilisation of water and other liquids, (P.), B., 1120.
- Ratnagiriswaran, A. N., Sehre, K. B., and Venkataraman, K., anthelmintic constituent of leaves of *Calycopteris floribunda*, A., 246.
and Venkatachalam, K., chemical examination of *Tylophora asthmatica* and isolation of the alkaloids tylophorine and tylophorinine, A., 1433.
See also Venkatachalam, K.
- Ratner, B., and Gruhl, H. L., passage of native proteins through the normal gastro-intestinal wall, A., 388.
- Ratner, E. I., significance of changes occurring during storage of calcium cyanamide in relation to its manurial activity, B., 687. Probable use of gypsum, phosphogypsum, and lime residues as fertilisers, B., 689. Influence of increasing amounts of exchangeable sodium on growth of plants and assimilation of phosphoric acid from difficultly soluble phosphates, B., 1109.
and Magaram, E. E., action of calcium cyanamide in relation to changes during storage and conditions of use, B., 1141.
- Ratschevski, P. A., physiological and therapeutic action of colloidal solutions of pro-vitamin-A when locally applied to the eye, A., 415.
- Ratschinski, F. J. See Alexeevski, E. V.
- Ratsimamanga, R. See Giroud, A.
- Ratzbaum, E. A., and Filippov, A. N., composition of lavrovite, A., 1100.

- Ran, M. A. G., intramolecular rotation in organic compounds, A., 15. Theory of the solvent effect in dipole moment measurements, A., 567.
- and Narayanaswamy, B. N., dipole moment of chloromethyl ether, A., 13. Effect of solvent in dipole moment measurements: polarisation and moment of nitrobenzene, A., 567.
- and Rao, S. S., dipole moment of tetralin, A., 1447.
- Rau, R. H. R., mechanism of increase in amylase activity during autolysis of barley powder, A., 1024.
- and Subrahmanian, V., influence of aeration on diastatic activity of barley during steeping, A., 249.
- See also Dey, B. B.
- Rau, Y. V. S., phosphorus in vegetable proteins. I. Globulins of *Lathyrus sativus* and *Vicia sativa*, var. *angustifolia*, A., 268.
- Raub, E., applicability of potentiometric silver titration in determining silver in practice, A., 185. Crystallisation of binary eutectic systems, A., 926. Differentiation between double and galvano-gold, B., 28.
- and Walter, E., electrodeposits of nickel-iron alloys, B., 413.
- Raucourt, M., anthracene oils used in protection of crops, B., 472.
- Raudnitz, H., and Behrens, F., degradation of naphthazarin and naphthazarin homologues by ozone, A., 1243.
- and Perlmann, G., santal, pterocarpin, and homopterocarpin, the colourless companions of santalin. II., A., 1372.
- Schindler, H., and Petru, F., constitution of alouritic acid, A., 1352.
- and Stein, E., alkannin. III., A., 217.
- and Stein, Walter, addition of β -dimethyl- Δ^7 -butadiene and diazomethane to alkannin methyl ether; constitution of alkannin, A., 1254.
- Rauen, H. See Wagner-Jauregg, T.
- Rausch, A., preparation of zinc chloride solutions, A., 1089. Determination of adsorptive power of charcoals for medicinal purposes, B., 523.
- Rausch, E., temperatures of evaporation and liquefaction in an ammonia refrigerating apparatus, B., 785.
- Rauss, K. F. See Dozois, K. P.
- Rautenberg, E., solubility and distribution of phosphoric acid in soils, B., 198. Stratified type of distribution of phosphoric acid in soil, B., 688.
- Ravazzoni, C. See Contardi, A.
- Rave, W., Stark effect in molecular spectra of nitrogen, carbon dioxide, and hydrogen, A., 675. Stark effect in molecular spectra of nitrogen, carbon monoxide, and hydrogen, A., 1291.
- Ravenna, G. See Spinoglio, P.
- Ravenswaay, H. J. See Meulen, H. ter.
- Ravie, F., vanadium in industry, B., 501.
- Ravikovitch, A. M., and Schile, V. N., determination of paraffin content of commercial paraffins and oil-paraffin mixtures (intermediate products), B., 710.
- Ravikovitch, S., anion exchange. II. Liberation of phosphoric acid ions adsorbed by soils, B., 36.
- Ravitsch, M. I., singular elements of the ternary system lithium oxide-nitric anhydride-water, A., 583, 1461.
- See also Kurnakov, N. S.
- Raw, G., and Ridley, F. F., response of coal-cleaning practice to demands of modern mining, B., 1078.
- Rawdon, H. S., effect of sulphur on forging steel, B., 1047.
- Ray, A. C. See Ray, (Sir) P. C.
- Ray, B. B. See Kellström, G.
- Ray, F. E. See Ahmed, N.
- Ray, G. B., and Blair, H. A., effect of varying concentrations of oxyhaemoglobin on its light absorption, A., 1517.
- Rây, J. N., Narang, K. S., and Juneja, H. R., constitution of vasicine, A., 765.
- Siloja, S. S., and Vaid, V. R., synthesis of bergapten and its derivatives. I. Furocoumarins, A., 986.
- See also Beri, M. L., Ghose, T. P., Juneja, H. R., and Narang, K. S.
- Rây, (Sir) P. C., synthesis of thiocamphor and other cyclic thioketones, A., 219.
- and Ghosh, N. N., complex platinum compounds with ter- and quinquivalent platinum. VII., A., 52. Varying valency of platinum with respect to mercaptanic radicals. VIII., A., 182.
- Goswami, H. C., and Ray, A. C., fluorination of organic compounds. I., A., 733.
- Rây, P. R., and Bose, M. K., quinaldine acid as a micro-reagent. I. Determination of zinc, and its separation from manganese. III. Determination of zinc in the presence of iron, aluminium, uranium, beryllium, and titanium, A., 318, 1094.
- and Gupta, J., quinaldine acid as a micro-reagent. II. Determination of copper, and its separation from cadmium, manganese, nickel, cobalt, etc., A., 318. Dimercaptotriiodazole as an analytical reagent, A., 1094.
- and Majumdar, A. K., hydrazinates of metallic thiosulphates, A., 594. Quinaldine acid as analytical reagent. II. Determination of zinc in presence of iron, aluminium, uranium, beryllium, and titanium, A., 597.
- and Saha, H., chromium diguanide complexes, A., 1487.
- and Sen, D. C., magnetic susceptibilities of cobaltic salts and the nature of the cobaltic ion, A., 514.
- See also Sen, D. C.
- Ray, R. C., and Ganguly, P. B., adsorption of water by silica gel and an examination of Patrick's adsorption formula, A., 28.
- and Mitra, H. C., ternary system potassium perchlorate-potassium borofluoride-water at 25°, A., 36. System potassium fluoborate-potassium periodate-water at 35°, A., 1323.
- Ray, S. K., parachor and chemical constitution. I. Structure of the carbohydrides. II. Structure of the triphenylmethane dyes. III. Structure of carbamide and thiocarbamide, A., 283, 1059, 1306.
- Ray, S. N., György, P., and Harris, L. J., effect of deficiency of vitamin-B complex on the oxido-reduction system in the eye-lens, A., 544.
- See also Harris, L. J.
- Ray, W. A. See Jones, G.
- Raybestos Co., friction material such as brake linings, (P.), B., 435. Felted asbestos sheet and sizing of asbestos, (P.), B., 988.
- Raybestos-Manhattan, Inc. See Novak, I. J.
- Raybould, W. E., conditioning of [coal-] washery water: flocculation, B., 338.
- Raychaudhury, D. P., formation and magnetic properties of some ferrites, A., 1196. Magnetometric measurement of susceptibility of ferromagnetic powders, A., 1197.
- and Sen Gupta, P. N., magnetic properties of some nickel alloys, A., 1199.
- Raychaudhury, S., and Majumdar, B., chemistry of precipitating action of the mucus of Boro fish, *Pisodonophis boro* (Ham. Buch.), A., 896.
- See also Mukherjee, Jnanendra Nath.
- Rayleigh, (Lord), passage of helium through compact solids, A., 129, 929. Oxygen afterglow, A., 907.
- Raymond, E., preparation of cymene, A., 203. Quantitative separation of nickel and cobalt, A., 951.
- Raymond, G., Morgen, R. A., and Fair, F., clarification apparatus, (P.), B., 51.
- Raymond, H. See Simon, A. W.
- Raymond, L. C. See Crampton, E. W.
- Raymond Bros. Impact Pulverizer Co. See O'Mara, R. F.
- Raymond-Hamet, formation of an isomeride of corynanthine by esterification of its product of alkaline hydrolysis, A., 365. Pharmacological effects of ergometrine, a new alkaloid of ergot, A., 1157. Colour reaction of some phenylamines, A., 1390. Non-modification of the sympatholytic activity of yohimbine by introduction of a double linking in the molecule, A., 1410. Corynanthine, A., 1513. Physiological inversion of the hypertensive effects of 3:4-dihydroxyphenylaminomethylcarbinol, A., 1533.
- and Millat, L., alkaloids of *Mitragyna stipulosa*, O. Kuntze, A., 366.
- See also Rothlin, E.
- Rayner, H. See McCleary, F. E.
- Rayner, M. C., mycorrhiza in relation to forestry. I. The genus *Pinus*, B., 968.
- Razaftmahery, R. See Terroine, E. F.
- Razek, J., colour analysis and specification, A., 1475.
- Razinsky, L. See Goldring, W.
- Razumeev, A., crocin, B., 828.
- Razumov, A. I. See Arbusov, A. E.
- Razuvaiev, G. A., and Koton, M. M., passage of phenyl radicals from metallo-organic compounds, A., 1139.
- Ré, agglomerate [from cork], (P.), B., 309.
- Rea, C. E., and Wangenstein, O. H., comparative efficacy of substances employed in prevention of intraperitoneal adhesions, A., 513.
- and Yuster, S., effect of deuterium oxide on rat sarcoma R-39, A., 382.
- See also Peters, H. C.
- Read, A. M., grinding mill, (P.), B., 1026.
- Read, B. E. See Chi, Y. F., and Pak, C.
- Read, F. E. See Hartley, F.
- Read, F. M., and Cole, C. E., mineral nutrition in Victorian fruit trees, A., 797.
- Read, H. H., and Double, I. S., chondrodite in the Glenelg limestone, Inverness-shire, A., 956.
- Read, J., and Grubb, W. J., menthone series. XIII. Relative molecular configurations of menthols and menthylamines, A., 88.
- See also Clark, J., Johnston, R. G., McLennan, J. C., and Wilson, N. A. B.

- Read, L. S. See Chaikov, I. L., and Olmsted, J. M. D.
- Read, W. H., physiology of mosaic disease of tomato, A., 554.
- and Orchard, O. B., plant injury following burning of sulphur in glasshouses, B., 374.
- See also Bewley, W. F., and Orchard, O. B.
- Reade, T. H. See Donald, C.
- Reading, (Miss) B. See Boulton, J.
- Reakes, L. V., jun., apparatus for micro-distillation, A., 1098.
- Reardon, A. J., and Griggs, H. P., solarisation at low intensity, A., 1211.
- Reavell, J. A., dried fruit and vegetable products [in powder form], (P.), B., 44.
- Reay, G. A., influence of freezing temperatures on haddock's muscle. II., B., 172.
- Estimating degree of preservation of white fish, B., 427.
- Preservation of fresh and thawed fish in ice, B., 475.
- Rebber, L. L., Crossfield, A. S., and Ragatz, E. G., apparatus for heating and cracking oils, (P.), B., 662.
- Reber, J. W. See Woodall-Duckham (1920), Ltd.
- Reber, K., and Bärger, A., qualitative separation of antipyretics, B., 332.
- Rebollo, R. R. See Pascual, J.
- Rebuffat, O., refractory nature of sillimanite, B., 23.
- Recarte, P. See Varela-Fuertes, B.
- Recknagel, A., scattering absorption of electron rays, A., 677.
- Reclamation Co. See De Vaney, F. D.
- Recorder, R. F., potassium cobaltic trioxalate, A., 315.
- Record, P. R., Bethke, R. M., and Wilder, O. H. M., effect of method of manufacture on nutrient value of fish meals determined by growth studies with chicks, B., 172.
- See Bethke, R. M., and Wilder, O. H. M.
- Recordati, G. See Mossini, A.
- Recordier, M. See Gaujoux, E.
- Red River Refining Co., Inc. See Schulze, J. E.
- Redaelli, P. See Ciferri, R.
- Reddemann, H., Wiedemann-Franz number of β -manganese at -190° , A., 288.
- Reddick, H. G. See Langenberg, F. C.
- Reddish, W. T., dry-cleaning, (P.), B., 1140.
- Myers, L. D., and Twitchell Process Co., mineral oil sulphates, (P.), B., 294.
- Reddy, H. A., dry colours of chromate type, B., 109.
- Redepenning, W. See Steubing, W.
- Reder, R., vitamin assay and its application in study of vitamin-B₁ and -B₂, contents of mung beans and grain sorghums, A., 415.
- See also Gallup, W. D.
- Redfern, C. A. See Rubber Producers Res. Assoc., and Schidrowitz, P.
- Redfern, S. See Johnston, W. R.
- Redfield, K. T. See Lawson, G. B.
- Redgrove, E. R., boundary friction of oxidised lubricating oils, B., 484, 837.
- Reding, R., variations in the time of coagulation [of blood] by X-rays, A., 881.
- Joukovsky, N., and Goffinet, R., acid-base equilibrium and the Henderson formula, A., 640.
- Redlich, K. A. See Loch, L.
- Redlich, O., general relation between vibration frequencies of isotopic molecules; calculation of harmonic force constants, A., 685.
- Redlich, O., and Klinger, H., theory of apparent molecular volume. III. Sucrose, A., 162.
- and Pordes, F., Raman spectrum of deuteromethyl alcohol and deuteriochloroform, A., 146.
- See also Abel, E.
- Redmond, J. C. See Knowles, H. B.
- Reeb, O., artificial photographic light sources, A., 713.
- Reece, W. H. See Leyland & Birmingham Rubber Co.
- Reed, C. I., effect of heavy administration of viosterol on metabolism of the rat, A., 1545.
- See also Rappaport, B. Z., and Steck, I. E.
- Reed, F. C., compounds [methyl alcohol] containing carbon, hydrogen, and oxygen, (P.), B., 297.
- Carbon black, (P.), B., 982.
- Reed, G. B. See Orr, J. H.
- Reed, G. H. See Pearce, J. N.
- Reed, H. C., and Niacet Chemicals Corp., treatment of hides [and skins], (P.), B., 242.
- Reed, H. S., and Dufrenoy, J., effects of zinc salts on oxidation process in plant cells, A., 1431.
- Effects of zinc and iron salts on cell structure of mottled orange leaves, A., 1548.
- See also Dufrenoy, J.
- Reed, Harry S., and Lamie, R. D., distillation and treatment of coal and other carbonaceous materials, (P.), B., 1033.
- Reed, J. B. [with Hopkins, B. S., and Audrieth, L. F.], rare earths. XLIV. Preparation of anhydrous rare-earth compounds by the action of fused and solid "onium" salts on the oxides, A., 1089.
- Reed, R. E., and Kendall Co., composition for and method of generating heat, (P.), B., 786.
- Reed, R. M. [with Tartar, H. V.], preparation of sodium alkylsulphonates, A., 606.
- See also Stillman, R. C.
- Reed, T. W. See Harman, S. W., and Hartzell, F. Z.
- Reed & Carnrick. See Eldred, F. R.
- Reedy, J. H. See Nicholson, D. G.
- Rees, E. A., function of felts [in paper-making], B., 798.
- Rees, F. M. See Braun, C. E.
- Rees, H. V. See Texas Co.
- Rees, O. W. See Grim, R. E.
- Rees, R. L. See Hewson, G. W.
- Rees, R. W., powdered alloys of low m.p., B., 954.
- Rees, T. A., machines for separation of metals of different m.p., (P.), B., 810.
- Rees, W. F., and Rees, Ltd., W. F., road surfacing, etc., (P.), B., 806.
- Rees, W. J., evaluation of coke-oven refractories, B., 453.
- Refractories for [cast-iron] foundry use, B., 993.
- See also Cross, A. H. B.
- Rees, William J. See Stiles, W.
- Rees, Ltd., W. F. See Rees, W. F.
- Reese, J. See Diels, O.
- Reese, J. S., sulphonation of benzoic acid, A., 210.
- Reese, S. W., and Yontz, M. A., water-absorbency tester [for paper], B., 400.
- Reeves, B. H., and Rockbestos Products Corp., insulated electrical conductor [stranded copper cable], (P.), B., 274.
- Insulated electrical conductor, (P.), B., 910.
- Insulated [arc-quenching] electrical conductors, (P.), B., 1001.
- Reeves, D. L. See Gemmill, C. L.
- Reeves, E. B. See Weech, A. A.
- Refinery Engineers, Inc., treatment of hydrocarbon liquids, (P.), B., 794.
- Refining, Inc. See Clayton, B.
- Reformatski, S., Visknevski, V., Jatzun-Visknevskaja, G., and Schulpekova, A., chemical nature of U.S.S.R. natural caoutchoucs and gutta-percha, B., 321.
- Regalia, G. B. See Ruth-Aldo Co.
- Regen, E. M., and Wilkins, W. E., phosphatase in heterotropic bone formation following transplantation of bladder mucosa, A., 1417.
- See also Wilkins, W. E.
- Regener, E., and Pfozter, G., vertical intensity of cosmic rays by threefold coincidences in the stratosphere, A., 1442.
- Reggiani, M., influence of electrolytes on formation and stability of metallic colloids formed by ultrasonic waves, A., 296.
- See also Marinesco, N.
- Reggiori, A. See Musatti, I.
- Regilant, R. O. See Valiaschko, N. A.
- Regler, F., crystal-lattice distortion and its distribution in drawn and bent rods, B., 413.
- Possibility of faulty explanations in X-ray diascopy due to neglecting selective absorption of X-rays, A., 1193.
- Regler, H. See Hein, F.
- Régner, J., and David, R., preservation of physiological activity of cocaine hydrochloride solution, A., 397.
- Influence of the anion combined with cocaine on the anesthetic activity of the alkaloid, A., 893. [Pharmacological] activity of cocaine salts, A., 1155.
- David, R., and Morchoisne, J., effect of constitution of peptones on growth of *B. pyocyaneus*, A., 1540.
- Effect of glucose and mineral elements on growth of *B. pyocyaneus*, A., 1540.
- Régner, M. T., antitoxic effect of glutathione in cyanide poisoning, A., 247.
- Glutathione in endocrine glands, A., 645.
- Distribution of quinine in the endocrine organs, A., 780.
- Rehbein, A., safflower [cultivation in America], B., 472.
- Rehberg, R. See Piratzky, W.
- Rehbinder, P. A., Kalinovskaja, N., and Michalova, H., surface friction and adsorption on metals, A., 697.
- and Solovjeva, L., new molecular characterisation of fats according to their polarity, B., 911.
- See also Gutman, S. M.
- Rehffuss, M. E., proteins and carbohydrates: their gastric digestion, A., 1407.
- Rehländer, P., toning with selenosulphate, B., 430.
- Reich, K., cultivation of a sterile amoeba on media without solid food, A., 1166.
- See also Bodenheimer, F. S.
- Reichard, O., determination of citric acid as pentabromoacetone in aqueous citric acid solutions, citrates, fruit juices, and fruit-juice preparations, A., 66.
- Determination of citric acid in milk and cheese by the pentabromoacetone method, B., 204.
- Reichardt, H., electric streaming potential in turbulent flow, A., 1321.
- Reichel, J., Cheplin, H. A., and Sharp & Dohme, Inc., lactobacilli concentrate, (P.), B., 287.
- Lactobacilli fruit and vegetable juices, (P.), B., 1116.
- See also Seibert, F. B.

- Reichel, L., Schardinger's milk enzyme, A., 783.
[with Neeff, A.], citric acid dehydrase of liver, A., 1162.
- Reichenbacher, E., electrical density and electronic radius, A., 425.
- Reicher, W., deposits in and around [sugar-factory] boilers, B., 201.
- Reichert, B., detection of potassium with "Gardinol W," A., 596. Constituents of *Verbena officinalis*, L. I. Identity of verbenalin and cornin, A., 1041.
and Koch, Werner, ω -nitroacetophenones. I. Catalytic hydrogenation of substituted ω -nitroacetophenones, A., 616. Catalytic reduction of substituted ω -nitrostyrenes, A., 744.
- Reichert, F., and Paulsen, E., possible differentiation between pedigree wheats based on variation in chemical composition of expressed sap and ash of the plant at different vegetative phases, A., 552.
- Reichert, J. S., and Sparks, W. J., leavening process, (P.), B., 122.
See also Du Pont de Nemours & Co., E. I.
- Reichert, R., and Erdélyi, J., minerals from Csódi Mt., Hungary, A., 726.
- Reichert, W. J. See Moll, W. J. II.
- Reichhold, O. See Hönel, H.
- Reichle, A. See Trautz, M.
- Reichstein, T., lactones of 3-keto-acids of the sugar series, (P.), B., 443. L-2-Ketogulonic acid [and its esters], (P.), B., 606. L-Ascorbic acid (vitamin-C), (P.), B., 701.
and Grüssner, A., methyl *d*-galacturonate and ascorbic acid, A., 732.
- Grüssner, A., and Bosshard, W., degradation of *l*-isopropylideneascorbic acid, A., 732.
- and Neracher, O., oxidation of *d*-glucose with bromine and alkali, A., 1107.
- Oppenauer, R., Grüssner, A., Hirt, R., Rhyner, L., and Glatthaar, C., synthesis of coumarone-2-[1]-carboxylic acid and of hydroxycoumarones, A., 1128.
- Pedolin, A., and Grüssner, A., conversion of the salts of isopropylidene sugar acids into methyl esters, A., 731.
- Rosenburg, H. R., and Eberhardt, R., preparation of saturated tertiary carboxylic acids, A., 1128.
- Schwarz, L., and Grüssner, A., vitamin-C; synthesis of β -keto- ϵ -methyl-*l*-arabohexonolactone (*l*-rhamnoascorbic acid), A., 608.
See also Bosshard, W., Glatthaar, C., and Steiger, M.
- Reickardt, O., boron carbide, a new abrasive, B., 804.
- Reid, A., bibliography on oil-well cement, B., 950.
See also Evans, Percy.
- Reid, C., blood and urine chemistry during specific dynamic action of glycine in normal subjects and in schizophrenics, A., 389.
- Reid, E., nutritive properties of soya bean-egg powder, a substitute for cow's milk in infant dietary, B., 698.
- Reid, E. E. See Cox, W. M., jun., Du Pont de Nemours & Co., E. I., and Ruhoff, J. R.
- Reid, E. F., failures in steel and cast-iron mains and provisions for their protection, B., 103.
- Reid, E. W. See Carbide & Carbon Chemicals Corp.
- Reid, F. R. See Jacob, K. D.
- Reid, J., treatment of paper, (P.), B., 266.
- Reid, J. D. See Scanlan, J. T.
- Reid, J. G. See Eddy, N. B.
- Reid, M. J. See Eastman Kodak Co.
- Reid, P. E., Anderson, M. X., Stubblefield, H. I., and Ivy, A. C., protective action of sodium thiocyanate against dysentery toxin (Shiga) in dogs and cats, A., 516.
- Reid, R. D., properties of a bacterial inhibitory substance produced by a mould, A., 662.
- Reid, W. T., control of forms of iron in determination of fusion temperatures of coal ash, B., 1027.
See also Nicholls, P.
- Reidemeister, W., detection of watering of milk by water content of plasma and f.p. determination, B., 42. Calculation of flour ash, B., 697.
- Reif, E. C. See Yavorsky, M. A.
- Reif, G., detection of trichlorotribenzylidenesorbitol with acetone, A., 325. Reaction for *Helvella esculenta* [distinction from other fungi], A., 1181.
and Borries, G., chemical characteristics of fungi, A., 1042.
- Reiff, F., Pöhls, P., and Overbeck, W., behaviour of mercuric cyanide towards bases, A., 944.
- Reiff, O. M. See Rather, J. B.
- Reihlen, H., and Flohr, E., red tetrachylaminoplatinum chloride, A., 182.
and Hühn, W., asymmetric platinum atom. VI., A., 1132.
- Reilly, J., and Drumm, P. J., mechanism of diazotisation, A., 1232.
- Reilly, J. H., and Richardson Co., [bituminous] moulded articles, (P.), B., 915.
See also Dow Chem. Co.
- Reilly, P. C., heating of carbonaceous materials, and formation of charges for such treatment, (P.), B., 615.
See also Cunningham, O. D., and Derby, I. H.
- Reimann, A. L., clean-up of gases by magnesium, calcium, and barium, A., 27. Contact potential difference between clean and oxygenated tungsten, A., 1446.
- Reimbold & Strick G.m.b.H. See Wirtz, F. M.
- Reimer, G. See Walter, Georg.
- Reimer, (Miss) M., Tobin, (Miss) E., and Schaffner, (Miss) M., additive reactions of unsaturated α -keto-acids. IV., A., 490.
- Reimers, F., titration of alkaloid salts and the indicator Poirrier-blue, A., 769. Determination of theophylline in soluble theophylline compounds, B., 205. Albumin tannate, B., 782. Determination of diaminoacridine in eulavine, B., 877. Stability of solutions of atropine methobromide and the determination of methylatropine, B., 1022.
See also Baggesgaard-Rasmussen, H.
- Reimers, H. A. See Dow Chem. Co., and Fichtbauer, C.
- Reimers, J. H. W. T., and Bartel, L. H., retention of protein by growing pigs, B., 922.
- Rein, H., and Talbott, J. H., gaseous metabolism of prolonged voluntary contraction of skeletal muscle, A., 387.
- Rein, K., determination of nitrite, especially in preserving salts, B., 304.
- Reinartz, F., Zanke, W., and Kürschgen, M., degradation of camphor and of diketocamphane in the animal organism, A., 496.
- Reinberg, G., small-scale production of [calcium] carbide, B., 493.
See also Harper, T. E., jun.
- Reindel, F., Frey, A., and Malenke, E., purification of fermentation gases by carbonic acid-washing and by active charcoal filters, B., 604.
and Niederländer, K., β -3-hydroxycholelonic acid, A., 976. Nor- and bisnor-lithocholic acid, A., 1494.
and Unterweger, K., "amine base" content of crude spirit, B., 203.
- Reindel, W. See Schuler, W.
- Reinders, W., significance of the reduction potential of the developer in developing the latent image, B., 701.
- Reindl, E. See Gossner, B.
- Reindollar, W. F., simplified assay of the official iodine-iodide solutions, B., 1163.
- Reindorp, J. H., chemistry of residual images, B., 575.
- Reine, W. J. P. van, plasmolysis and deplasmolysis, A., 671.
- Reinemund, K. See Kuhn, R.
- Reiner, L., and Smythe, C. V., glucose metabolism of *Trypanosoma equiperdum* in vitro, A., 125.
See also Valentine, E.
- Reiner, S., new accelerators [of vulcanisation], B., 113.
- Reinhardt, C. E., and New Jersey Zinc Co., anodic coating of zinc-base metals, (P.), B., 506.
- Reinhardt, A. See Bardenheuer, P.
- Reinhardt, G. A., and Youngstown Sheet & Tube Co., annealing and cleaning ferrous articles, (P.), B., 1098.
- Reinhardt, O. K., and Bond Electric Corporation, electrolytic [primary] cell, (P.), B., 1100.
- Reinhart, F. M. See Krieble, V. K.
- Reinhold, F., and Schulze, R., evaluation of growth curves applied to development of three breeds of alpine cattle, B., 327.
- Reinhold, G., raw materials for paper-making, B., 446.
- Reinhold, H., and Möhring, H., rate of formation and electrical conductivity of β -silver sulphide; formation of surface films on metals, A., 567.
and Seidel, H., kinetics of formation of silver sulphide from silver and sulphur or hydrogen sulphide, A., 1208.
- Reinhold, J., and Kochs, J. [with Schmidt, M., and Marschke, G.], influence of manuring on yield and quality of cabbage, B., 821.
- Reinicke, R., universal significance of cubic face-centred lattice structure for causal comprehension of hitherto unknown relations, A., 17. Directed primary and subsidiary valencies of the oxygen atom deduced from space-lattice of arsenolite as a geometrical basis for quadrivalent oxygen in oxonium compounds, A., 286. Stereochemical conception of the complex structure of the acids of phosphorus, A., 569. Conception of tetrahedral atoms, A., 810. Survival of molecular linking in rock-salt crystal, A., 814.
- Reininger, H., behaviour of sprayed metal coatings towards liquid and gaseous substances, B., 413. Improvement of quality of sprayed metallic coatings by non-metallic intermediaries and supports, B., 996.
- Reinkling, O. A., soil and *Fusarium* diseases, B., 471.

- Reinmuth, E., [fungicidal] pickling of vegetable seeds, B., 375.
- Reinsberg, C., pressure displacement of spectral lines near the series limit, A., 425.
- Reinwein, H. See Athanasiou, A.
- Reis, A., reactivity of coke, B., 834.
- Reis, J. See Ostern, P.
- Reis, K., and Dietzel, A., reduction of alkalinity of soda-lime silicate glass by dissolved carbon dioxide, B., 21.
- Reisemann, E., recovery of solvents in the rubber industry, B., 1058.
- Reiss, K. H., photo-electric apparatus adapted to investigation of light counters, A., 465.
- Reiss, M., Fleischmann, F., and Schwarz, L., blood-arginine and growth, A., 1014. Effect of arginine activators on free arginine of blood, A., 1392.
- Schwarz, L., and Gothe, M., prolan and yeast metabolism, A., 542.
- Reiss, Max, dependence of photophoresis on pressure at high gas pressures, A., 801.
- Reissner, R. See Hecht, F.
- Reitemeier, R. F. See Jenny, H.
- Reith, J. F., and De Beus, J., does azoimide disturb micro-iodometric determinations by Winkler's method? A., 1214. Determination of traces of lead in drinking water, B., 527.
- Reithmüller, C. See Audubert, R.
- Reitmann, J., new synthesis of ricinine, A., 97.
- Reitz, O., and Bonhoeffer, K. F., introduction of heavy hydrogen into the growing organism, A., 132, 661.
- Reizeustein, L. J., varieties of fish oils and their uses, B., 509.
- Rejnov, N. See Rodionov, S.
- Rek, L., influence of fluorides on blood-phosphorus and phosphorus metabolism of rabbits, A., 399.
- Rekeda, I. N. See Korsheniovski, G. A.
- Rektorik, Z., preparation of a cinchona fluid extract by fractional percolation, B., 700.
- Rembert, E. W., and Johns-Manville Corp., reactions with silica and products thereof [basic magnesium silicate], (P.), B., 226.
- Voorhees, B. V., and Tide Water Oil Co., dewaxing [of oils] by filtration, (P.), B., 893.
- Remennikova, V. S. See Mindlin, S. S.
- Remesov, I., and Sepalova, O., colloidal condition of cholesterol, cholesteryl ester, and lecithin. X. Reducing action of cholesterol sols, A., 1522.
- Remezov, N. P., exchange cations in soils of U.S.S.R., B., 1156.
- and Verigina, K. V., characteristics of organic matter of soils of the U.S.S.R. III. Organic nitrogen of soils, B., 72.
- and Vlasov, M. M., adsorption of anions by soils, B., 71.
- Remick, W. L., and Hydrotator Co., separation of mixed materials, (P.), B., 3.
- Remington, J. S., earth colours and zinc oxide, B., 239. Diatomite [in paints], B., 319.
- Remington, R. E. See Coulson, E. J., Holmes, A. D., and Kolnitz, H. von.
- Remington Arms Co., Inc. See Brün, W.
- Remler, R. F. See Grasselli Chem. Co.
- Remp, D. G., and Bing, F. C., inanition as a factor in vitamin-B₂ deficiency, A., 262.
- See also Myers, V. C.
- Remy, E., chemical composition of virulent, avirulent, and weakened bovine and human tubercle bacilli, A., 126. Analyses of mineral springs of Bad Peterstal from the historical viewpoint, A., 600.
- See also Uhlenhuth, P.
- Remy, H., aerosols, A., 820.
- and Behre, C., absorption of fogs from fuming sulphuric acid, A., 818.
- and Seemann, W., dependence of mist absorption by liquids on the bubble size. I and II, A., 1067, 1314.
- Remy-Genneté, P., action of mercury vapour on calcium at room temperature, A., 312. Chemical reactivity of redistilled magnesium; action of water and of carbon dioxide on magnesium at room temperature, A., 312.
- Renaud, P., chloronitrides, nitrides, and hydroxynitrides of phosphorus, A., 833.
- Renaudin, J., and Renaudin, (Mme.) J., micro-iodometry, A., 184.
- Renaudin, (Mme.) J. See Renaudin, J.
- Renaux, M. A. See Lasseur, P.
- Rencker, E., dilatometer study of ternary silica-soda-alumina glasses, A., 36.
- See also Dubois, P.
- Rendell, L. P., problems of the textile dyeing trade, B., 721.
- and Thomas, H. A., discoveries relating to the theory and practice of wool dyeing, B., 626.
- Rendle, T. See Chivers & Sons, Ltd.
- Renfrew, (Miss) A. G., and Cretcher, L. H., cinchona alkaloids in pneumonia. II. Ketone formation with sodamide, A., 766.
- See also Butler, C. L.
- Renfrew, M. M. See Cone, W. H.
- Renfrew, P. B., and Bowser & Co., Inc., S. F., apparatus for purifying insulating and lubricating oils, (P.), B., 218.
- Rennenkampff, U. von. See Meyer, Ludwig.
- Renner, F., prevention of tung oil defects, B., 239.
- Renner, H. O. See Short Milling Co., J. R.
- Renner, R., interaction of electronic and nuclear motion for linear triatomic molecules, A., 15.
- Rennerfelt, I., electric [induction] furnaces, (P.), B., 910.
- Rennie, J. B., azotæmia in acute Bright's disease, A., 1400.
- Rennie, R. F. See Westinghouse Lamp Co.
- Renniger, M., X-ray reflexion and real structure in rock-salt, A., 151.
- Rentschler, H. C. See Westinghouse Lamp Co.
- Rentschler, M. J., and Jeavons, W. R., recovering barium sulphate from barytes, (P.), B., 724.
- See also Jeavons, W. R.
- Renwick, F. F., Dufaycolour process, B., 175.
- and Harrison, G. B., colour photography [registration device in copying lenticular screen images], (P.), B., 751.
- and King, R. B., antihalation coatings for photographic supports, (P.), B., 206.
- Renz, J., Amanita toxin, A., 267.
- Repetto, O. See Deulofeu, V.
- Repetto, S., determination of fat in milk, B., 1161.
- Replat, S., determination of value of products to aid mercerisation, B., 626.
- Reppmann, W., drop reaction for arsenic with N-ethyl-8-hydroxytetra[hydro]-quinoline hydrochloride (kairin), A., 184.
- Refábek, J. See Hykel, O. V.
- Rerup, J., rôle of lactic acid in conversion of rye proteins, B., 330.
- Resch, C. E. See Norris, F. W.
- Reschke, J. See Scheunert, A.
- Research Corporation. See Hedberg, C. W. J., Lawrence, O. U., Poillon, H. A., and Wintermute, H. A.
- Research Corporation of New York, electrical precipitation of suspended particles from gaseous fluids, (P.), B., 30. Apparatus for electrical precipitation of suspended particles from gases, (P.), B., 316.
- Resh, M. P., Itzkovitch, A. V., and Osmulski, V. F., ultramarine from spent sulphite liquors, B., 32.
- and Markov, N. Y., pulping of seed flax straw, B., 667.
- See also Kantor, L. A.
- Résines & Vernis Artificiels, impregnation of cellulosic fabrics [with synthetic resins], (P.), B., 450.
- Resinose Products & Chemical Co., emulsifying, detergent, and wetting agents, (P.), B., 14. Diphenylolpropane, (P.), B., 665.
- See also Bruson, H. A., and Fournobert, E.
- Resinox Corporation. See Ivey, K. M.
- Resnik, L. I., tanning of upper leather and cowhide with sulphite-cellulose extract ZNKP No. 1, B., 241.
- Resnitschenko, M. S., and Alakrinskaja, K. A., formation of wheat-flour gluten as a colloid-chemical complex, B., 377.
- and Popzova, A. I., extracting lecithin from plant products (maize and soya bean). II, B., 475.
- Respats, Inc. See Respess, R. B.
- Respess, R. B., and Respats, Inc., preparation or reduction of wood or other fibrous material, (P.), B., 846.
- Robbins, N. A., and Respats, Inc., continuous manufacture of wallboard, (P.), B., 97.
- Ress, H., optical studies of chemical wood pulps [influence of beating, loading materials, cooking, and calendering], B., 184.
- Restaino, S., double sulphates of rare-earth and alkali metals; sulphates of praseodymium and potassium, of praseodymium and rubidium, of praseodymium and cesium, and of samarium and sodium, A., 180. Composition of sky-blue diopside from 1906 Vesuvius eruption, A., 1479.
- Restelli, E. See Zappi, E. V.
- Reszetniak, J. See Chraszez, T.
- Retel, R., knock in Diesel motors, B., 980.
- Retelskaja, P. See Krestovnikov, A.
- Rezeanu, (Mme.). See Urechia, C. I.
- Reti, L., alkaloids of the *Cactaceæ*, A., 1257.
- Arnold, R. I., and Luduena, F. P., alkaloid of *Cereus coryne*, Solm., A., 674.
- See also Lewis, J. T.
- Retortillo, N. M., and Moles, E., systems NaOH-NaNO₃ and KOH-KNO₃, A., 447.
- Retrovsky, R., periodic analysis of mineral waters and *Spirogyra borgeana*, Transcau., A., 661.
- Rettger, L. F. See Lewis, K. H., and Weiss, J. E.
- Reuber, R. See Klement, R.
- Reuter, F. See Clutterbuck, P. W.
- Reuterskiöld, J. A., attempt to follow the course of a reaction by potentiometric measurements, A., 937.

- Revelant, *E.*, artificial marble, (P.), B., 806.
 Revelle, *R.* See Moberg, *E. G.*
 Revenda, *J.*, polarographic studies with dropping mercury electrode. I. Anodic polarisation and influence of anions, A., 37.
 Revere Copper & Brass, Inc. See Doss, *J. H.*
 Revere Rubber Co. See Chittenden, *F. D.*
 Reverey, *G.* See Rosenbusch, *R.*
 Revukas, *A. J.* See Whitmore, *W. F.*
 Rewald, *B.*, chemical, physical, and colloidal properties of lecithin, B., 746.
 Rex-Hide Rubber Manufacturing Co. See Tseng, *A. T. K.*
 Rex Research Corporation. See Hedenburg, *O. F.*
 Rexer, *E.*, ultra-violet absorption and colour centre formation of alkali halide crystals, A., 1443.
 Rey, *M.*, reducibility of zinc oxide and Matignon's law of volatility, B., 953.
 Rey, *P.*, effect of extracts of the posterior lobe of the pituitary on water exchange in the frog, A., 668.
 Reyerson, *L. H.*, isotopic interchange between acetylene and heavy water, A., 713.
 and Cameron, *A. E.*, sorption of halogens by silica gel and charcoal, A., 696.
 See also Cameron, *A. E.*, and Yuster, *S.*
 Reyes, *N. C.* See Manresa, *M.*
 Reynaert, *S.*, determination of water- and citric acid-soluble potassium in arable soils, B., 373. Composition of artificial cream, B., 1019.
 Reynecke, *J.*, keeping quality of fruit, B., 43.
 and Eksteen, *L. L.*, bitterpit of apples, B., 822.
 Reynolds, *C. E.* See Jacobsen, *A. E.*
 Reynolds, *D.* See Fleming, *R.*
 Reynolds, *D. A.* See Fieldner, *A. C.*
 Reynolds, *D. L.*, eastern end of the Newry igneous complex, A., 1100. Genetic significance of biotite-pyroxenite and hornblende, A., 1477.
 Reynolds, *D. S.*, Willard and Winter's method for determination of fluorine [in phosphatic material], B., 493.
 Jacob, *K. D.*, Marshall, *H. L.*, and Rader, *L. F., jun.*, phosphate fertilisers by the calcination process; reaction between water vapour and Florida hand-pebble phosphate, B., 601.
 See also Marshall, *H. L.*
 Reynolds, *E. B.*, Killough, *D. T.*, and Vantine, *J. T.*, size, shape, and replication of plots for field experiments with cotton, B., 166.
 and Stansel, *R. H.*, effect of fertilisers on length of cotton fibre, B., 918.
 Reynolds, *F.* See Hurd, *L. C.*
 Reynolds, *F. L.* See Dow Chem. Co.
 Reynolds, *F. M.* See Bennett, *G. M.*
 Reynolds, *H.*, Coile, *H. D.*, and Werkman, *C. H.*, butyl alcohol-acetone fermentation in sugar media, A., 788.
 McCleskey, *C. S.*, and Werkman, *C. H.*, sugar dissimilation by *Shigella dysenteriae*, var. Sonne, A., 1420.
 Reynolds, *J. D.* See Haire, *H. J.*
 Reynolds, *M. C.*, and Epstein, *A. K.*, margarine, (P.), B., 252.
 See also Epstein, *A. K.*
 Reynolds, *S. R. M.*, structural and functional features of rabbits' uteri following prolonged oestrin administration, A., 1173.
 See also Allen, *W. M.*, and Sauer, *J. J.*
 Reynolds, (*Miss*) *T. M.*, and Robinson, *R.*, strychnine and brucine. XXXIII. Methoxymethylchano dihydrostrychnine acid and its resistance to facile dehydrogenation, A., 1137.
 Reynolds, *W. E.*, and Hext, *A. R.*, colorimeter, (P.), B., 363.
 Reynolds, *W. H.*, and Manlove, *Alliott & Co., Ltd.*, de-watering of sand or other granular material, (P.), B., 257.
 Rezacsek, *G.*, effect of variations in p_H of tan liquors on rate of fixation of tannin, B., 817.
 See also Dohogne, *A.*
 Režek, *A.*, modified boiling vessel for micro-ebullioscopic mol. wt. determinations by Pregl's method, A., 1096.
 Rhea, *L. J.* See Rabinovitch, *I. M.*
 Rhead, *T. F. B.*, and Jefferson, *R. E.*, texture of refractories. I. Non-regularity of texture of gasworks fireclay refractories and its possible effect on durability, B., 949.
 Shorrock, *J. N.*, and Evans, *Charles Lovatt*, texture of refractories. II. Pictorial methods of recording the texture of refractories or similar materials, B., 949.
 Rhein, *W.* See Weltzien, *W.*
 Rheinboldt, *H.*, and Wisfeld, *W.*, fission of hexachlorodisiloxan by acetylacetone, A., 333. Silicon oxyhalides, A., 714.
 Rheinfels, *C.*, prevention of accidents in chemical industry, B., 177.
 Rheinwald, *H.*, action of nettolin in preventing scab in potatoes, B., 869.
 and Stahl, *H.* [with Lebttag, *O.*], determination of nutrient condition of moor soils, B., 165.
 Rhinelander Paper Co. See Dodge, *L. L.*
 Rhines, *F. N.* See Mehl, *R. F.*
 Rhoads, *C. P.*, and Miller, *D. K.*, vitamin- B_2 and canine black tongue, A., 649.
 See also Miller, *D. K.*, and Van Slyke, *D. D.*
 Rhodes, *E.*, sp. gr. of preserved [rubber] latex, B., 512. Rubber production, B., 1104.
 See also Hastings, *J. D.*
 Rhodes, *E. O.*, and Amer. Tar. Products Co., melting of [bituminous] materials, (P.), B., 711.
 Rhodes, *F. H.*, washing in filtration, B., 82. Effect of entrainment on plate efficiency in rectification, B., 82, 530.
 and Younger, *K. R.*, rate of heat transfer between condensing organic vapours and a metal tube, B., 929.
 Rhodes-Perry-Martin, Inc. See Mohn, *A.*
 Rhodin, *J. G. A.*, and Westman, *Ltd., E. B.*, viscosimeters, (P.), B., 532.
 Rhodius, *R.* See Enslin, *O.*, and Lindau, *G.*
 Rhokana Corporation, Ltd. See Bosqui, *F. L.*
 Rhyner, *L.* See Reichstein, *T.*
 Riabtschenkov, *A. I.* See Adadurov, *I. E.*
 Riabtschikov, *D. I.*, and Schulman, *V. M.*, preparation of anhydrous chlorides of certain heavy metals, A., 314.
 Rial, *W. D.* See Black, *J. C.*
 Ribagnac, effect of high temperatures on mineral oils, B., 7.
 Ribaud, *G.*, variation with temperature of specific heats of perfect gases, A., 573.
 and Zaer, *A. R.*, calculation of temperatures of flames, A., 598.
 Riber, *C. R.* See Siemens Bros. & Co.
 Ribère. See Lemaire.
 Ribereau-Gayon, *J.*, mechanism of oxidation of iron; reactions and equilibria involving iron in wines, A., 51. Copper in musts and wines, B., 920.
 Ricardo, *H. R.*, gasoline and Diesel engines, B., 438.
 Ricca, *B.*, and Meduri, *P.*, analysis of water of the Zomaro (Calabria) spring, A., 60. Water of the Motticella Baths (Calabria), A., 468.
 Ricci, *J. E.*, ternary system Na_2SO_4 - NaBrO_3 - H_2O and a sixth possible type of solid solution formation between two components in the Roozeboom classification, A., 825.
 Rice, *C.* See Seamless Metals, Ltd.
 Rice, *C. E.*, development of precipitins for protein, lipid, and carbohydrate fractions of *S* and *R* forms of tubercle bacilli, A., 1170.
 Rice, *C. O.* See Cavett, *J. W.*
 Rice, *C. W.*, natural silicates: their deposition as objectionable formation in boilers, B., 209.
 Rice, *C. W., jun.* See Thompson, *M. de K.*
 Rice, *F. O.*, and Dooley, *M. D.*, thermal decomposition of organic compounds from the viewpoint of free radicals. XII. Decomposition of methane, A., 191.
 and Glasebrook, *A. L.*, thermal decomposition of organic compounds from the viewpoint of free radicals. X. Identification of methyl groups as dimethyl ditelluride. XI. Methylene radical, A., 62.
 and Greenberg, *J.*, keten. III. Heat of formation and heat of reaction with alcohols, A., 36.
 and Rodowskas, *E. L.*, thermal decomposition of organic compounds from the viewpoint of free radicals. XIII. Decomposition of ethyl nitrite, A., 471.
 Rodowskas, *E. L.*, and Lewis, *W. R.*, thermal decomposition of acetone, A., 67.
 and Polly, *O. L.*, formation of alicyclic hydrocarbons from free radicals, A., 1229.
 Rice, *H. E.*, fundamentals of printing-ink making, B., 734.
 Rice, *H. M. A.*, amphibole from the Purcell sills, British Columbia, A., 842.
 Rice, *J. A.*, and Bublestone, *C.*, cellular concrete, (P.), B., 1045.
 Rice, *N. E.*, nutrition of *Flabellula mira*, Schaeffer, A., 1013.
 Rice, *O. K.*, Stokes phenomenon for the differential equations which arise in inelastic atomic collisions, A., 1050.
 and Gershinowitz, *H.*, entropy and the absolute rate of chemical reactions. I. Steric factor of bimolecular associations. II. Unimolecular reactions, A., 306, 1205. Activation energy of unimolecular reactions. II., A., 1206.
 and Siekman, *D. V.*, polymerisation of ethylene induced by methyl radicals, A., 1084.
 See also Allen, *A. O.*, Campbell, *H. C.*, and Siekman, *D. V.*
 Rich, *C. E.*, differentiation of cake and pastry flours by the viscosity of their water suspensions, B., 1114.
 Rich, *F. M.*, observations and theory on slack-wind blast-furnace operation, B., 1046.
 Rich, *F. V.* See Pacsu, *E.*

- Rich, T., water purification by ozone, B., 176.
- Richalet, P., electric furnaces [for melting and treating glass], (P.), B., 682.
- Richard, G., α -chlorinated ketones, A., 621.
- α -Halogenated ketones, A., 979.
- Richards, A. N. See Westfall, B. B.
- Richards, C. W. See Imperial Chem. Industries.
- Richards, D. W., jun., and Barach, A. L., prolonged residence in high-oxygen atmospheres; effects on normal individuals and on patients with chronic cardiac and pulmonary insufficiency, A., 370.
- Cournand, A., and Rappaport, I., relation of the regulatory mechanism of respiration to clinical dyspnoea, A., 1149.
- Richards, E. H., and Shrikhande, J. G., preferential utilisation of different forms of inorganic nitrogen in the decomposition of plant materials, B., 282.
- Richards, E. T., basic and acid hearths in reverberatories for copper-refining, B., 411. Working up of accumulator sludge, B., 681.
- Richards, F. B. See Woodall-Duckham (1920), Ltd.
- Richards, L. See Downes, H. R.
- Richards, L. W., and Lynn, E. V., [constituents of] *Ceanothus velutinus*, A., 267.
- Richards, M. B., rôle of vitamin-A in nutrition, A., 1034.
- Richards, T. C., magnetic dilatometer, A., 723.
- Richardson, C. H., spray residues on fruit and vegetables, B., 875. Insecticides and insect toxicology, B., 1013.
- See also Levine, N. D.
- Richardson, E. E. See Eastman Kodak Co.
- Richardson, E. G. See Railston, W.
- Richardson, G. M. See Melville, J.
- Richardson, G. T. See Andrew, J. H.
- Richardson, H. H., derris, nicotine, Paris-green, and other poisons in combination with molasses in control of gladoliu thrips, B., 39. Control of the Mexican mealybug (*Phenacoccus gossypii*) on greenhouse chrysanthemums, B., 1013.
- Richardson, H. K., small cast thorium oxide crucibles, B., 406.
- Richardson, H. L., calcium cyanamide. IV. Use of cyanamide and other forms of nitrogen on grassland, B., 38. Action of calcium cyanamide on germinating seeds and on charlock in barley, B., 777.
- and Crowther, E. M., calcium cyanamide. V. Utilisation of calcium cyanamide in pot-culture experiments, B., 282.
- Richardson, H. O. W., low-energy β -rays of radium-E, A., 275.
- and Leigh-Smith, A., β -rays of radium-D, A., 6.
- See also Leigh-Smith, A.
- Richardson, I., jun. See Du Pont de Nemours & Co., E. I.
- Richardson, J. W. See Parks, G. S.
- Richardson, K. C., secretory phenomena in the oviduct of the fowl including process of shell formation examined by the microincineration technique, A., 1524.
- Richardson, L. A. See Ardagh, E. G. R.
- Richardson, L. R. See Hogan, A. G.
- Richardson, M. See Teale, V. M.
- Richardson, N. A., coal-tar creosote oil as a wood preservative, B., 852.
- Richardson, O. W., spectrum of ordinary hydrogen (H_2), A., 271.
- and Rymer, T. B., spectrum of the hydrogen molecule. I. The 3, $4d^2\Sigma$, 11, $4\rightarrow 2p^3\Pi$, and $3s^2\Sigma\rightarrow 2p^3\Pi$ systems. II. Band systems due to transitions from four new triplet states to $2p^3\Pi$. III. New bands and band systems ending on $2s^2\Sigma$ and an extension of the singlet system $1Q\rightarrow 2p^1\Sigma$, A., 135.
- See also Denisoff, A. K.
- Richardson, R., effect of exercise on blood-sugar in the diabetic, A., 382.
- and Case, A. L., effect of exercise on blood-sugar in the diabetic, A., 886.
- Richardson, R. F. See Ardagh, E. G. R.
- Richardson, R. G. See McCreary, H. J.
- Richardson, R. S., and Chem. Eng. Corp., purification of gases, (P.), B., 440.
- Richardson, R. W. See Du Pont de Nemours & Co., E. I.
- Richardson, T. See Haworth, R. D.
- Richardson, W. A., plaster board and papers used therein, (P.), B., 1045.
- Richardson Co., Stevenson, E. P., and Billings, H. J., making a beater furnish, (P.), B., 401.
- See also Fisher, H. C., Reilly, J. H., and Stafford, E.
- Richaud, R. See Godchot, M.
- Riches, T., and Mann, W. B., simple mercury seal, A., 1343.
- Richmond, G. M. See Luck, J. M.
- Richou, R. See Ramon, G.
- Richter, and Hundt, influence of different rations on the growth and wool yield of Angora rabbits, B., 972.
- Richter, C. See Jansen, W. H.
- Richter, C. P., pregnancy urine given by mouth to gonadectomised rats: its effect on spontaneous activity and on the reproductive tract, A., 791.
- Richter, G. A., accelerated ageing tests for determining permanence of papers, B., 16. Relative permanence of papers exposed to sunlight. I. and II., B., 667.
- and Brown Co., pulping of manila, sisal, or similar raw fibrous materials, (P.), B., 96. Refined cellulose pulp, (P.), B., 96. Cellulose for viscose-making, (P.), B., 143. Refining of cellulose, (P.), B., 184. Fibrous web for impregnation purposes, (P.), B., 185. Cellulose products, (P.), B., 266. Cellulosic products, (P.), B., 266. Glycerinated paper, (P.), B., 352. Paper sizing and composition therefor, (P.), B., 669. Impregnated sheet products, (P.), B., 669. Chemical pulping process, (P.), B., 1041. Ripening of viscose syrup, (P.), B., 1137. Cyclic process of pulping raw cellulosic material, (P.), B., 1139. Water-laid felts, (P.), B., 1139. Bleaching of cellulose fibre, (P.), B., 1140.
- Gosselink, J. G., and Brown Co., treatment [regeneration] of acid setting baths used in [viscose] artificial silk manufacture, (P.), B., 184.
- Schur, M. O., and Brown Co., paper product, (P.), B., 352. Water-repellent papers of high wet strength, (P.), B., 669.
- See also Brown Co.
- Richter, G. H. See Kuhn, C. S., and Williams, H.
- Richter, Hans, interferometric determinations with X-rays in chlorine, methane, and trimethylamine, A., 432.
- Richter, Helmut. See Roth, W. A.
- Richter, H. E. See Kaatz, L.
- Richter, H. J. See Koelsch, C. F.
- Richter, H. W., titanium-white, (P.), B., 277.
- and Jenkins Co., G. O., leatherboard product, (P.), B., 819.
- Richter, J., plant leaves and their functions, A., 671.
- Richter, K. See Bünger, H.
- Richter, Kurt, preparation of benzine from brown-coal tar by cracking in presence of surface catalysts, B., 293.
- Richter, M. See Schleede, A.
- Richter, W. F., and Chem. Holding Corp., artificial straw, (P.), B., 1139.
- Richtmyer, F. K., and Barnes, S. W., relative intensities of certain L-series X-ray lines of gold (79), A., 1439.
- Barnes, S. W., and Ramberg, E., widths of the L-series lines and of the energy levels of Au (79), A., 138.
- See also Kaufman, S.
- Richtmyer, N. K., and Hann, R. M., glucosidodihydroferulic acid, A., 477.
- and Hudson, C. S., rearrangement of sugar acetates by aluminium chloride; neolactose and d-altrose, A., 1355.
- and Yeakel, E. H., structure of populin, A., 69.
- Rick, A. W., rôle of emulsifier in bitumen emulsions, B., 86.
- Rickard, T. A., primitive smelting of copper and bronze, B., 231.
- Rickerken, E. See Guertler, W.
- Rickert, H. F. See Diels, O.
- Rico, J. T., and Baptista, A. M., inactivation of adrenaline by aldehydes, A., 666. Influence of reduced glutathione and ascorbic acid on destruction of adrenaline by oxidising enzymes of the potato, A., 1535. Inactivation of adrenaline by extracts of organs, A., 1543.
- Riddell, W. A., and Frederick Iron & Steel Co., coke and producer gas, (P.), B., 1082.
- Riddell, W. H. See Caulfield, W. J., Cave, H. W., and Fay, A. C.
- Riddle, F. H., and Peck, A. B., effect of repeated firing on sp. gr. and microstructure of aluminosilicate minerals, B., 768.
- Riddle, O., hormones, A., 1170.
- Bates, R. W., and Lahr, E. L., prolactin induces broodiness in fowl, A., 1426. Maternal behaviour induced in virgin rats by prolactin, A., 1426.
- and Dottli, L. B., action of parathyroid hormone in normal and hypophysectomised pigeons, A., 789.
- Lahr, E. L., Bates, R. W., and Moran, C. S., response of adult rat testes, sex accessories, and adrenals to injections of prolactin, A., 790.
- See also Bates, R. W.
- Rideal, E. K., adsorption concepts in chemistry, A., 818.
- See also Barrer, R. M., Belchetz, L., Gee, G., Kemp, I., Moss, S. A., jun., and Quillet, C.
- Ridenour, G. M., activated-sludge treatment [of sewage] with extremely low solids, B., 431.
- See also Setter, L. R.
- Ridenour, L. N. See Yost, D. M.
- Rider, T. H., and Merrell Co., W. S., purification of ricinoleic acid, (P.), B., 160.
- See also Bambach, K., Cook, E. S., and Seif, L. D.

- Ridge, H. M., and Hunn, S. C., removal of gases from molten metals and alloys, (P.), B., 679.
- Ridgely, G. H. See Johnson, W. C.
- Ridgway, R. R., boron carbide; new crystalline abrasive and wear-resisting product, B., 227.
- and Norton Co., electric resistance furnace, (P.), B., 811.
- See also Milligan, L. H.
- Ridi, M. See Passerini, M.
- Ridi, M. S. E. See Gillam, A. E.
- Ridiger, T. B. See Rabinovitch, A. J.
- Ridler, K. E. W. See Mitchell, J. H.
- Ridley, F. F. See Raw, G.
- Ridout, J. H. See Best, C. H.
- Riebeck'sche Montanwerke Akt.-Ges. See Eberhardt, O., and Pungs, W.
- Riebeling, C., adenylic acid in the central nervous system, A., 1005.
- Riebsomer, J. L., and Tallman, R. C., oxidising hydrolysis of ozonides from unsaturated acids, A., 472.
- Rieche, A., and Meister, R., alkyl peroxides. XI. Peroxides of formaldehyde; hydroxymethyl hydrogen peroxide, A., 1222.
- Rieche, H., dielectric loss of liquid insulators, A., 915.
- Riedel, E. See Bamann, E.
- Riedel, F., carbon balance in manuring trials with carbon dioxide, B., 689.
- Riedel, R. See Ostwald, W.
- Riedel, W., causes of adhesion [between stone and acid oils], B., 61.
- Riedl, E. See Auer, H., and Gerlach, Walther.
- Riedmüller, L. See Frei, W.
- Riegel Paper Corporation. See Herriek, W. W.
- Riegert, A. See Grabar, P.
- Riehl, N. See Berthold, R.
- Riehm, H., colorimetric determination of potassium according to Lebermann, A., 1093. Sedimetric determination of potassium [in soils], B., 740.
- Rapid determination of amino-nitrogen by formaldehyde titration, B., 779.
- See also Lundin, H.
- Rieke, C. A. See Boyce, J. C.
- Rieke, R., and Naumann, J., influence of preheating on technical workability of pipes, B., 545.
- Rieman, W. See Neuss, J. D.
- Ries, H., geology and clay research, B., 1009.
- Ries, H. E., jun. See Harkins, W. D.
- Riesch, L. C., and Kilpatrick, M., effect of electrolytes on rate of hydrolysis of diethyl acetal, A., 829. Classical dissociation constant of benzoic acid in various salt solutions, A., 1076.
- Riesenfeld, E. H., and Chang, T. L., critical temperature of heavy water, A., 691. Critical data of light and heavy water and their density-temperature diagram, A., 1456.
- and Müller, Friedrich, potential of azides, A., 305.
- and Tobiank, M., polyacids, A., 314. Proportion of heavy water in water of crystallisation of minerals, A., 1477.
- Riess, C., formation of isocyclic acid in sulphonation of oils, B., 318. Report of the Oil and Fat Committee of the German Section of the I.V.L.I.C. [on sulphonated oils], B., 558.
- and Barth, K., mol. wt. determinations in basic chromium salt solutions, B., 355.
- See also Küntzel, A.
- Riess, H., explosive properties of lignite dust-air mixtures as a function of the physical and chemical nature of the dust, the source of ignition, and the carbon dioxide or oxygen content of the carrying gas, B., 291.
- Riesser, O., and Karbe, L., mobilisation of calcium by salts of pyrocatecholdisulphonic acid, A., 1020.
- Kunze, G., and Galle, K., connexion between muscle metabolism and weather. II. and III., A., 387, 890.
- See also Salomon, K., and Schein, H.
- Riesz, E. See Battegay, M.
- Riezler, W., scattering of polonium α -particles by oxygen and neon, A., 1048.
- Riffart, H., colorimetric determinations with Zeiss step-photometer in examination of foodstuffs, B., 379.
- Riffenburg, H. B., colorimetric determination of small quantities of chlorides in waters, A., 316.
- Rigamonti, R. See Natta, G.
- Rigby, A., potting clays, B., 1043.
- Rigby, G. R., changes in size of tiles and bricks on treatment with water, B., 188.
- Rigg, G. B., and Henry, B. S., origin of gases in the float of bladder kelp, A., 797.
- Rigg, J. G. See Hilditch, T. P.
- Righini, G., relative temperature and pressure of gases in an electric arc, A., 1046.
- Rigler, R., "water intoxication" and water diuresis in adrenal insufficiency; importance of the adrenals in osmo-regulation, A., 1528.
- Rigotard, L., Italian volcanic soils, A., 191.
- Riising, B. M. See Baumann, C. A.
- Rijswijk, P. van, floors of magnesium cement, (P.), B., 632.
- Riker, A. J. See Conner, H. A.
- Riko, R. See Kita, G.
- Riko, S. See Kita, G.
- Rikovski, I. I. See Pushin, N. A.
- Riley, C., granite-porphyrates of Great Bear Lake, North-west Territories, Canada, A., 1344.
- Riley, C. G., rate of deterioration in insect-killed spruce on the Gaspé peninsula, B., 408.
- Riley, C. H., separation and detection of cocaine in mixtures of cocaine and procaine, B., 924.
- See also Niederl, J. B.
- Riley, G. W. See Spence & Sons, Ltd., P.
- Riley, H. L., and Blayden, H. E., reactivity of carbon, A., 453.
- See also Astin, S., and Blayden, H. E.
- Riley, J. See Wright, L.
- Riley Stoker Corporation. See Daniels, F. H.
- Rimarski, W., and Friedrich, H., production of electrostatic charges by flowing gases [in acetylene-welding], B., 1146.
- and Konschak, M., pressure in high-pressure acetylene plants, B., 613.
- Rimington, C., and Quin, J. I., photosensitisation of animals in S. Africa. VII. Nature of the photosensitising agent in Geeldikkop, A., 383.
- See also Marais, J. S. C.
- Riml, O., and Engelhart, E., effect of the corpus luteum on basal exchange, A., 542.
- Rinskaja, M. M. See Gutman, S. M.
- Rinck, E., solidification diagram for sodium-cæsium alloys, A., 22. Solidification diagrams of alloys formed by two alkali metals: potassium-rubidium alloys, A., 693.
- Ringbom, A., theory of potentiometric precipitation titrations using electrodes of the second kind, A., 947. Potentiometric titrations with electrodes of the second kind, A., 948. Use of lead nitrate for precipitation-titration of anions. I. Potentiometric titrations. II. Hydrolytic precipitation titrations, A., 948. Use of lead nitrate as precipitant in titrimetric determination of certain ions, A., 1472.
- Ringeissen, M. See Wahl, A.
- Ringrose, A. T. See Norris, L. C.
- Ringsted, A., appearance of paresis in adult rats suffering from chronic avitaminosis-E, A., 548.
- Rinkes, J. J., pyrrole derivatives. I., A., 221.
- Rinne, R., determination of aluminium in soil analysis, B., 865.
- Rinneberg, K. A., and Wüterich, dyeing of workmen's blue overall fabric, B., 353.
- Rinoldi, oiling of wool, B., 843.
- Rinse, J., stability of chlorinated rubber, B., 369. Weathering of zinc oxide paints, B., 1004.
- Rinskaja, E. S. See Pisarshevski, L. I.
- Rintelen, P. See Balks, R., Bömer, A., and Feist, K.
- Riopel, P. See Labarre, Jules.
- Riou, P., and Delorme, J., presence of manganese in maple and cane sugar, B., 648. Analysis of maple-sap products, B., 1015.
- Ripan-Tilici, R., conductometric titration of selenocyanates with silver nitrate, A., 53. Conductometric determination of selenocyanides in presence of cyanides, A., 718. Conductometric determination of cyanates in presence of cyanides, A., 718. Conductometric titration of selenates with lead nitrate and with barium chloride, A., 1092. Direct and indirect determination of cyanates with adsorption indicators, A., 1093. Rapid gravimetric determination of selenates, A., 1337.
- Ripert, J., analysis of products containing pyrethrum extract, B., 332.
- and Gaudin, O., relative toxicities of pyrethrins I and II, A., 1157.
- Ripley, L. B., sense of taste in insects, B., 823.
- and Hepburn, G. A., adhesives for cryolite [insecticidal] suspensions, B., 822. Incompatibility of molasses with sodium fluosilicate and [lead] arsenate [in agricultural sprays], B., 1159.
- Rippel, A., importance of potassium in metabolism of *Aspergillus niger*, A., 535.
- Rips, S. M. See Gelperin, I. I.
- Riseman, J. E. F. See Ernestene, A. C.
- Rishina, R. G. See Petrov, G. S.
- Risi, A., physico-chemical changes in blood following pneumothorax and section of the phrenic nerve, A., 385. Toxic effect of phenylquinolinecarboxylic acids, A., 396. Chemotherapy of dyes; reticulo-endothelial system, A., 529.
- Riskaltschuk, A. T. See Tolstopiatov, I. M.
- Riskina, S. R., variations in enzymic content of different varieties of sugar-beet at the germination period, A., 264.
- See also Blagoveschenski, A. V.
- Riss, J. G., Shuravleva, T. G., and Suslov, B. N., inflammability of pyrites and flotation tailings, B., 1091. Explosivity of pyrites-air mixtures, B., 1146. Inflammability of carboniferous pyrites, B., 1146.

- Riss, I. G., and Uritzskaja, R. G., dissociation of magnesium chromate, A., 179.
- Ritchie, A. See Christie, E. W.
- Ritchie, G. W., and Smith, Frederick S., solder for soldering aluminium, (P.), B., 557.
- Ritchie, M., thermal decomposition of ozone, A., 39, 1206. Inert gas effects in photosynthesis of hydrogen bromide, A., 46.
- Ritchie, P. D., pyrolysis. III. Pyrolysis of carbonic and sulphurous esters, A., 1223.
- See also Burns, R., and Imperial Chem. Industries.
- Ritchie, S. G., determination of the initial and final sets of plaster of Paris, B., 726.
- Ritsma, I. C., identification reactions of gum arabic, B., 329.
- Ritson, F. See Gas Chambers & Coke Ovens.
- Rittenberg, D. See Schoenheimer, R.
- Ritter, C. J. See Kurth, E. F.
- Ritter, F., measurement and regulation of temperature, B., 1025.
- Ritter, F. O., high-concentration formic acid; production from aqueous acids, B., 1128.
- Ritter, G. J., morphology of cellulose fibres as related to the manufacture of paper, B., 1136.
- and Barbour, J. H., effect of pretreatment of wood on the lignin determination; distribution of methoxyls in wood, B., 845.
- Ritter, J. J., synthetic camphor, (P.), B., 1133.
- Ritter, W., origin of acetoin and diacetyl in Magenlab and other cheese cultures, B., 426.
- Ritter Chemical Co., leather, (P.), B., 1058.
- Rittman, A. C. See Eastman Kodak Co.
- Rittmann, R., and Unterrihter, P., oxalic acid metabolism in nephritis; determination of the acid in blood, food, urine, and faeces, A., 1269.
- Rittmeister, W., heat treatment under pressure of high-boiling hydrocarbons, (P.), B., 217.
- Ritzenthaler, B. See Staudinger, H.
- Ritzman, E. G. See Benedict, F. G.
- Rivosch, F. I. See London, E. S.
- Rivière, C. See Beck, A., and Clément, L.
- Rivkin, S. M., synthesis of naphthyl methyl ketone; mechanism of the Friedel-Crafts reaction, A., 980.
- and Meerzon, E. A., isomerisation of linalool to geraniol, A., 983.
- Rizk, M. See Gracie, D. S.
- Rjabinin, A. A. See Yakimov, P. A.
- Rjabinin, G. N., and Schubnikov, L. I., magnetic induction in a superconducting lead crystal, A., 287. Magnetic properties and critical currents of superconducting alloys, A., 689. Magnetic properties and critical currents of superconducting alloys, A., 923. Magnetisation cycle of superconducting lead, A., 1309.
- Rjabinskaja, A. See Koschtojan, C.
- Rjabtschenko. See under Riabtschenkov.
- Ro, A., action of papaverine on blood-sugar of rabbits, A., 1156.
- Roach, W. A., tree injection, B., 1014.
- See also Greenslade, R. M.
- Roadstrum, V. N. See Faber, W. F.
- Roark, R. C., advantages and limitations of organic insecticides, B., 743.
- Robb, P. D. See Salter, W. T., and Scharies, F. H.
- Robbins, B. H., ether anaesthesia: concentration in inspired air and blood required for anaesthesia, loss of reflexes, and death, A., 655. Proteolytic enzyme in the latex from the fig tree (*Ficus glabrata*); p_H of optimal activity, A., 1417. Proteolytic enzyme content of latex from the fig tree (*Ficus carica*, L.), A., 1417.
- Robbins, C. L., and Kydd, D. M., metabolic criteria of hyperparathyroidism, A., 1401.
- Robbins, N. A. See Respass, R. B.
- Robbins, S. S., and Wilhelm, M. L., demonstration of polar localised phosphoric acid liberation by directly stimulated muscle of cold-blooded animals, A., 387.
- Robbins, W. J. See Adams, E.
- Robbins, W. R., effect of potassium on structure and composition of sweet potato, B., 117. Celery chlorosis, B., 516.
- Robecchi, A., hypoglycæmic action of pancreatic diathermy, A., 1401.
- Robert, (Miss) J. L. See Alphen, J. van.
- Roberti, G., ignition temperature of fuel mixtures containing alcohols, B., 791.
- Roberts, A. A., liquid fuels, (P.), B., 1034. Fuel, (P.), B., 1082.
- and Smith, C. W., liquid fuels, (P.), B., 1034.
- Roberts, A. C., preparation of thrombin, A., 1024.
- Roberts, C. H. M., and Petroleum Rectifying Co. of California, electrical separation of emulsions, (P.), B., 316. Magnetic separation of emulsions, (P.), B., 813.
- and Tretolite Co., breaking of petroleum emulsions, (P.), B., 838, 891, 1127.
- See also De Groote, M.
- Roberts, E., and Naugatuck Chem. Co., rubber surfacing material, (P.), B., 468.
- Roberts, G. L., carbon gas-black; its use in the printing-ink industry, B., 734.
- Roberts, H. M. See Imperial Chem. Industries.
- Roberts, H. S., polymorphism in FeS-S solid solutions. I. Thermal study, A., 928.
- Roberts, I. O. See Owen, E. A.
- Roberts, J., application of heat to [vertical] retorts, coke ovens, etc., (P.), B., 981.
- and Proctor & Schwartz, Inc., chemical dryer, (P.), B., 289.
- Roberts, J. K. (Cambridge), adsorption of hydrogen on tungsten, A., 293. Essential structural discontinuities in certain adsorbed films, A., 929.
- and Whipp, B., heat of adsorption of hydrogen on tungsten, A., 293.
- Roberts, Joseph K. See Standard Oil Co., and Standard Oil Co. of Indiana.
- Roberts, J. W., Pierce, L., Smith, M. A., Dunegan, J. C., Green, E. L., and Goldsworthy, M. C., copper phosphate [fungicidal] mixture, B., 567.
- Roberts, K. C., action of nitric acid on *p*-hydroxyphenyltrimethylammonium iodide, A., 339.
- and Clark, (Miss) H. B., rearrangement of α -aminophenyl ethers. IV. *N*-Alkylphenoxazines, A., 1491.
- and De Worms, C. G. M., rearrangement of α -aminophenyl ethers. III. 2-Acylamidodiphenyl ethers, A., 1491.
- De Worms, C. G. M., and Clark, (Miss) H. B., rearrangement of α -aminodiphenyl ethers. II., A., 484.
- Roberts, M. V. See Stokes, A. J.
- Roberts, R. H. See Hopkins, R. H., and Niemann, C.
- Roberts, W. J., detection of gold in animal tissues, A., 1290.
- Roberts, Ltd., J. W., and Dolbey, N. L., formation of heat- and sound-insulating coatings, (P.), B., 434.
- Robertson, A. See Curd, F. H., King, H. I., Heyes, R. G., and Mercer, D.
- Robertson, D. See Robertson, James A.
- Robertson, D. W. See Happel, J.
- Robertson, E. B. See Duke-Elder, W. S.
- Robertson, E. C., and Doyle, M. E., intestinal stasis in low mineral diets, A., 1528.
- Robertson, F. R., and Campbell, J. G., possible catalytic effect of some metals and alloys on changes occurring in crude cottonseed oil during storage, B., 1101.
- Robertson, G. J., and Griffith, C. F., conversion of derivatives of glucose into derivatives of altrose by simple optical inversions, A., 1225.
- See also Oldham, J. W. H.
- Robertson, G. R., Boulder Dam, B., 591.
- Robertson, H. F. See Carbide & Carbon Chemicals Corp.
- Robertson, H. M., kiln, (P.), B., 82.
- Retort, (P.), B., 530.
- Robertson, I. M., and Shewan, J. M., modified chromic acid method for determination of carbon, A., 639.
- See also Ogg, W. G.
- Robertson, J., influence of temperature on products of electrolysis of acetate solutions, A., 45.
- Robertson, James, solution of problems in heat conduction by the method of wave-trains, B., 49.
- Robertson, J. A., and Bailey, F. W., cause of fibre orientation in paper, B., 222.
- Robertson, James A., Robertson, D., and McCandless, G. F., heat treatment [case-hardening] of ferrous metals, (P.), B., 106.
- Robertson, J. D., and Wilson, A. T., basal metabolism and impedance angle in thyrotoxicosis and myxoedema, A., 108.
- Robertson, J. K., molecular spectrum of cadmium vapour, A., 423.
- Robertson, J. M., two-crystal moving-film spectrometer, A., 57. Space-group of resorcinol, A., 286. X-Ray study of structure of phthalocyanines. I. Metal-free, nickel, copper, and platinum compounds, A., 813. Structure of benzoquinone; quantitative X-ray investigation, A., 921. X-Ray analysis of structure of dibenzyl. II. Fourier analysis, A., 921.
- Linstead, R. P., and Dent, C. E., mol. wts. of the phthalocyanines, A., 689.
- Robertson, K. W. See Le Fèvre, (Mrs.) C. G.
- Robertson, M. See Lawrie, N. R.
- Robertson, S. See Courtaulds, Ltd.
- Robertson, W. E., α -dinitrophenol and its influence on metabolism, A., 526.
- Robey, R. F. See Fernelius, W. C.
- Robiette, A. G., electric melting of cast iron, B., 409.
- See also Electric Resistance Furnace Co.
- Robin, P., iron in common sponge, A., 1146.
- Robinov, M., use of alder waste in production of brown pulp; alder and aspen shavings from veneer and match factories for production of brown pulp, B., 446.
- and Kondratyev, V., steaming of wood, B., 142.

- Robins, S. S. See Dische, Z.
- Robinson, A. L., and Frank, H. S., heats of dilution of strong electrolytes, A., 36.
See also Gulbransen, E. A., and Hutchisson, E.
- Robinson, (Mrs.) A. M. See Cook, James Wilfred.
- Robinson, B. W., reflexion of X-rays from powdered anthracene, A., 286.
- Robinson, C., nature of aqueous solution of dyes, A., 299. Diffusion coefficients of dye solutions and their interpretation, A., 580.
See also Moilliet, J. L.
- Robinson, C. J., and Blake-Smith, L., parting of chemically treated, emulsions, (P.), B., 758. Breaking emulsions, (P.), B., 758, 1076.
- Robinson, C. K. See Hardy, F.
- Robinson, C. S., p_H of the contents of the small intestine, A., 513.
See also Duncan, C. W., and Robinson & Son, Ltd., T.
- Robinson, E. B. See Imperial Chem. Industries.
- Robinson, E. J. See Ponder, E.
- Robinson, E. L. See Clark, P. H.
- Robinson, G. D., small vacuum metal vapour furnace, A., 465.
- Robinson, G. H. See Eldridge, E. F.
- Robinson, (Mrs.) G. M., and Robinson, R., leuco-anthocyanins and -anthocyanidins. I. Isolation of peltoynol and its molecular structure, A., 985.
- Robinson, H. M. See Winter, O. B.
- Robinson, H. R., X-ray levels and atomic constants, A., 139. Auger effect and forbidden transitions, A., 801.
and Clews, C. J. B., secondary cathode rays expelled from metals by molybdenum $K\alpha$ radiations, A., 908.
- Robinson, I. See Robinson & Son, Ltd., T.
- Robinson, J. See Standard Oil Co.
- Robinson, J. B., and Chicago Hydraulic Oil Co., hydraulic pressure fluid, (P.), B., 611.
- Robinson, J. D. See Bruson, H. A.
- Robinson, J. L., physiological factors affecting germination of seed maize, A., 419.
- Robinson, J. T., heat treatment of aluminium alloys, B., 553. Effects of thermic treatment on physical properties of aluminium alloys, B., 729.
- Robinson, P., non-inflammable wooden building product, (P.), B., 309.
See also Du Pont de Nemours & Co., E. I.
- Robinson, P. L. See Aynsley, E. E., and Cook, R. P.
- Robinson, R., structure of cholesterol, A., 209. Chemistry of the anthocyanins, A., 868.
and Schlittler, E., synthesis of substances related to sterols. III. Synthesis of ketohydrophenanthrene derivatives, A., 1499.
and Tomlinson, (Miss) M. L., thio-pyrimidine derivatives, A., 762. Pyrimidines. II., A., 1381.
and Walker, J., synthesis of chromylum salts. II., A., 1129. Synthesis of substances related to sterols. VI., A., 1495. Constitution of cedrene, A., 1503.
and Young, P. C., synthesis of substances related to sterols. V. Condensation of phenylsuccinic anhydride with veratrole under the influence of aluminium chloride, A., 1495.
- Robinson, R. See also Achmatowicz, O., Appel, H., Dovey, W. C., Groenewoud, P., Imperial Chem. Industries, King, F. E., Lewis, H. J., Rapson, W. S., Reynolds, (Miss) T. M., and Robinson, (Mrs.) G. M.
- Robinson, Richard A. See Mosettig, E.
- Robinson, Robert A., activity coefficients of the alkali bromides and iodides in aqueous solution from vapour-pressure measurements, A., 1077. Activity coefficients of alkali nitrates, acetates, and *p*-toluenesulphonates in aqueous solution from vapour-pressure measurements, A., 1077.
and Law, N. H., rate of reaction between ferric and stannous salts in solution, A., 1082.
See also Peak, D. A.
- Robinson, R. B. See Millican, T.
- Robinson, R. J., and Wirth, H. E., free ammonia, albuminoid nitrogen, and organic nitrogen in the waters of the Puget Sound area, during the summers of 1931 and 1932, and in the waters of the Pacific Ocean off the coasts of Washington and Vancouver Island, A., 724. Photometric investigation of cerulomolybdate determination of phosphate in waters, A., 836.
See also Thompson, T. G.
- Robinson, R. L. See Pease & Partners, Ltd.
- Robinson, T., and Lancaster Asphalt, Inc., mixing and reducing apparatus, (P.), B., 787.
and Lancaster Processes, Inc., apparatus for disintegrating and dispersing, (P.), B., 50. Disintegration [of pulp], (P.), B., 786.
- Robinson, W. O., Edgington, G., and Byers, H. G., chemistry of infertile soils derived from rocks high in magnesium and generally high in chromium and metal, B., 645.
- Robinson & Son, Ltd., T., and Robinson, C. S., towers, columns, silos, etc., for storage and treatment of cereal grain, (P.), B., 782.
- Robinson, I., and Molesworth, E. N., separation of powdered or granular materials, (P.), B., 882.
- Robison, R. See Fell, H. B., Niven, J. S. F., and Tankó, B.
- Robison, W. L., lack of vitamin-A not the chief cause of cottonseed meal injury in pigs, A., 396.
- Robles, H. de V., apparatus for filtering with avoidance of evaporation, A., 723.
- Roblin, R. O., jun., Davidson, D., and Bogert, M. T., synthesis of condensed polynuclear hydrocarbons by cyclo-dehydration of aromatic alcohols. III. Cyclisation of phenylated alcohols and related olefines, A., 481.
- Robscheit-Robbins, F. S. See Daft, F. S.
- Robson, D. S., [treatment of fresh] cream, (P.), B., 523.
- Robson, H. C., copper-refinery furnace firing and refractories, B., 1146.
- Robson, J. See Simon-Carves, Ltd.
- Robson, J. M., effect of oestrin on uterine activity and its relation to experimental abortion and parturition, A., 1425. Action of oestrin on uterus of hypophysectomised and of pregnant rabbits, A., 1426.
- Robson, S., and Lewis, P. S., metallic coatings as protective media, B., 309.
See also Nat. Processes, Ltd.
- Robson, W. See Boyd, W. J.
- Robson, W. D., Irwin, D. A., and King, E. J., experimental silicosis: quartz, sericite, and irritating gases, A., 386.
- Rocchetti, S. See Angeletti, A.
- Rocha e Silva, M., isoelectric point of the erythrocyte membrane and hamolysis by ammonium chloride, A., 1519.
See also Bier, O. G.
- Rochaix, A. See Morel, A.
- Roche, (Mme.), A., mol. wt. of proteins, A., 998.
and Bracco, J., osmotic pressure and mol. wt. of serum-globulins, A., 374.
Dorier, M., and Marquet, F., mol. wt. of human serum-albumin, A., 1142.
and Garcia, I., ratio of phosphorus to nitrogen in bone during growth of the rat, A., 525.
and Marquet, F., osmotic pressure and molecular weight of serum-albumin, A., 643. Ageing of serum, A., 1142.
and Roche, J., osmotic pressure and mol. wt. of haemoerythrin of *Sipunculus*, A., 229.
- Roche, H., application of rubber to rayon yarns and fabrics, B., 1140.
- Roche, J., composition of the haemocyanin and haemoerythrin of *Sipunculus nudus*, A., 372. Spectral characters and specificity of haemoglobins, A., 640.
and Jean, G., composition and specificity of haemoglobins, A., 640.
and Latreille, M., action of animal phosphatases on the mono- and di-esters of phosphoric acid, A., 660. Phosphatase of red corpuscles, A., 1164.
and Leandri, A., phosphatase of the long bones during growth in the rat, A., 1164.
See also Roche, (Mme.) A.
- Roche, (Mlle.) S. See Charonnat, R.
- Rochester, G. D., absorption spectrum of stannous sulphide, A., 1187.
and Howell, H. G., vibrational analysis of absorption spectrum of lead sulphide, A., 280.
See also Howell, H. G.
- Rochkov, V. See Karassik, V. M.
- Rochlina, M., blood-protein of hens and egg-laying, A., 374. Composition of hens' blood in relation to egg-laying, A., 374.
- Rochow, E. G., and Dennis, L. M., properties of thallium triethyl, A., 574.
- Rochow, W. F., properties and applications of modern refractories, B., 546.
- Rockbestos Products Corporation. See Reeves, B. H.
- Rockware Glass Syndicate, Ltd., and Adams, Frederick W., purification of silica sands, etc., (P.), B., 271.
- Rockwell, F. W., exchanges of water, electrolytes, and heat during phenyl-ethylhydantoin sickness, A., 1411.
- Rocquet, P. See Moureu, H.
- Roda, E. See Oberdisse, K.
- Rodda, J. L. See Anderson, E. A.
- Rodden, C. J., electric micro-muffle, A., 1096.
and Plantinga, O. S., flame and spark-in-flame spectra of rare-earths, A., 1438.
- Roddy, W. T. See O'Flaherty, F.
- Rode, A. A., degree of [soil] podsolisation, B., 1106. Chemical composition and mechanical fractions of podsol and bog soils, B., 1156.
See also Prasolov, L. I.

- Rodebush, *W. H.*, absolute rate of a chemical reaction, A., 707.
- and Spealman, *M. L.*, recombination of hydrogen atoms in presence of hydrogen chloride, A., 944. Action of hydrogen bromide on nitrogen afterglow, A., 1437.
- See also Clark, *A.*, and Spealman, *M. L.*
- Rodewald, *Z.*, and Pláček, *B.*, synthesis of "alkeines" derived from α -alkoxypropionic acid, A., 730.
- Rodillon, *G.*, acid-base balance of the body; determination by analysis of urine and an interpretation of variants in analytical data, A., 648.
- Rodin, *S. V.* See Trussov, *A. A.*
- Rodine, *M. T.*, thermal conductivities of bismuth single crystals as influenced by a magnetic field, A., 154.
- Rodio, *G.*, hardening of clay or clay-containing soils, (P.), B., 919.
- Rodionov, *S.*, Pavlova, *E.*, Rejnov, *N.*, Stupnikov, *N.*, and Juzefovitch, *A.*, short ultra-violet in the solar spectrum, A., 556.
- See also Karev, *M. W.*
- Rodionov, *V.* See Kalabuchhov, *N.*
- Rodionova, *K.* See Ginsburg-Karagitscheva, *T.*
- Rodman, *C. J.*, Dunmire, *R. P.*, and Buckeye Twist Drill Co., purification of oil [used in electrical apparatus], (P.), B., 89.
- Rodnevitch, *B. N.* See Tscholincev, *G. V.*
- Rodowskas, *E. L.* See Rice, *F. O.*
- Rodrian, *R.*, and Buttermann, *H. H.*, electrochemical recovery of metals [gold and platinum] from ores and other metal-bearing materials, (P.), B., 107.
- Rodrigues, *C.* See Pacheco, *G.*
- Rodriguez, *A. O.*, coating of ferrous [metal] bodies with other metals [e.g., aluminium], (P.), B., 998.
- Rodriguez, *G.*, and Hardy, *F.*, available [exchangeable] potash [in Trinidad sugar-cane soils], B., 917.
- See also Hardy, *F.*
- Rodt, *V.*, determination of free calcium hydroxide in set cement, B., 228. Determination of free calcium hydroxide in hardened cement and cement-trass mixtures, and of combined calcium hydroxide in lime-trass mixtures, B., 455.
- Rodwell, *K. E. H.*, anticorrosive coatings [on iron and steel], (P.), B., 638.
- Rodzaevskaja, *V. D.* See Tokmanov, *V. E.*
- Rodzevich, *V.* See Divinski, *A.*
- Roe, *A.* See Hiller, *N. H.*
- Roe, (*Miss*) *E.* See Cook, *James Wilfred*, and Haslewood, *G. A. D.*
- Roe, *F. C.*, aération of water by air diffusion, B., 880.
- Roe, *J. H.*, colour test for vitamin-C, A., 262.
- and Cowgill, *G. R.*, metabolic fate of galactose in adult dogs and rabbits, A., 1409.
- Gilman, *A.*, and Cowgill, *G. R.*, oxidation occurring after ingestion of galactose in the dog, A., 891.
- Roebing, *W.* See Berg, *Richard*.
- Roebuck, *J. R.*, and Osterberg, *H.*, Joule-Thomson effect in argon, A., 22.
- Joule-Thomson effect in nitrogen, A., 1313.
- Röhm, *O.*, materials [substitutes for glass, wood, or metal] containing polymerised organic compounds, (P.), B., 1103.
- Röhm & Haas Co., laminated glass, (P.), B., 101*.
- [Interlayers for] laminated glass, (P.), B., 228.
- Hydrogenation of amides [to amines], (P.), B., 487.
- and Niederl, *J. B.*, substituted phenols, (P.), B., 841.
- See also Bauer, *W.*, Blackadder, *T.*, Mayers, *H. H.*, Powers, *D. H.*, Somerville, *I. C.*, and Turley, *H. G.*
- Roehr, *W. W.* See Davis, *M. N.*
- Röhrig, *H.*, test of reactivity of aluminium and aluminium alloys, B., 28.
- Surface treatment and surface protection of aluminium and its alloys, B., 233.
- Effect of increase of purity on properties and workability of aluminium, B., 501.
- Detection of copper particles on rolled aluminium wire, B., 808.
- Recrystallisation of aluminium in the cast state, B., 955.
- and Käpernick, *E.*, separation of aluminium-iron-silicon eutectic in pure aluminium, B., 636.
- and Krekeler, *K.*, prevention of attack of light metals by water, B., 905.
- and Nicolini, *W.*, coating of aluminium and its alloys, B., 233.
- Roelofsen, *P. A.*, metabolism of purple sulphur bacteria, A., 406.
- Römer, *F.* See Funk, *H.*
- Römer, *G. H.* See Hertel, *E.*
- Römisch, *H.* See Boëtius, *M.*
- Röntgen, *P.*, and Möller, *F.*, solubility of gases in copper and aluminium, B., 27.
- Roepke, *M. H.* See Ort, *J. M.*, and Welch, *A. D.*
- Roepke, *R. R.*, determination of phosphorus fractions in blood-serum, A., 509.
- and Hughes, *J. S.*, phosphorus partition in blood-serum of laying hens, A., 374.
- Roersch, *C.*, thyro-parathyroidectomy and diffusible calcium of serum, A., 539.
- Roesch, *K.*, and Schleimer, *O. J.*, articles from malleable cast iron, (P.), B., 1147.
- Roeser, *W. F.*, Dahl, *A. L.*, and Gowens, *G. J.*, standard tables for chromel-alumel thermocouples, A., 721.
- and Hoffman, *J. I.*, f.p. of gallium, A., 155.
- and Wensel, *H. T.*, methods of testing thermocouples and thermocouple materials, A., 721.
- Roesner, *G.* See Girsewald, *C. von*.
- Rössler, *F.*, exchange of vibration and translation energies between iodine molecules and inert gases, A., 1305.
- Roethlisberger, *A.* See Ruzicka, *L.*
- Röver, *M.*, determination of dielectric constants of aqueous solutions of electrolytes at high frequency, A., 13.
- Roffo, *A. E.* See Roffo, *A. H.*
- Roffo, *A. H.*, Calcagno, *O.*, and Ramirez, *R. L.*, pharmacodynamic study of vanadates, A., 1413.
- Calcagno, *O.*, and Roffo, *A. E.*, spectrography of cholesterol and its derivatives, A., 616.
- and Ramirez, *R. L.*, basal metabolism and methylene-blue, neutral-red, and malachite-green (in rats), A., 1159.
- Roger, *R.*, resolution of *r*-mandelic acid with (—)ephedrine, A., 1494.
- and McGregor, *A.*, action of Grignard reagents on desyl chloride. I. Aryl Grignard reagents, A., 84.
- and Mackay, *W. B.*, determination of carbon and hydrogen in organic compounds, A., 630.
- Rogers, *A. F.*, formula and crystal system of alleghanyite, A., 323.
- Rogers, *B. A.*, silver [equipment] and corrosion problem, B., 153.
- Rogers, *D. G.* See Nat. Aniline & Chem. Co.
- Rogers, *E.* See Werder, *J. F.*
- Rogers, *G. E.*, bricks, etc., (P.), B., 546.
- Rogers, *J.* See Owen, *E. A.*
- Rogers, *J. S.*, and Blaine, *R. L.*, commercial masonry cements, B., 308.
- Rogers, (*Miss*) *K. M.* See Plant, *S. G. P.*
- Rogers, *M. A. T.* See Ingold, *C. K.*
- Rogers, *R. R.*, theory of chromium electro-deposition, B., 554.
- Electrochemical cladding of ferrous products, B., 809.
- and Bloom, *E. jun.*, zinc electrodeposition: deposition from ammonium sulphate-zinc baths, B., 154.
- Rogers, *T. H.*, and Shoemaker, *B. H.*, Indiana oxidation test for motor oils, B., 54.
- Voorhees, *V.*, and Gasoline Antioxidant Co., motor fuel products, (P.), B., 984.
- See also Standard Oil Co.
- Rogers, *T. S.*, correlation and interpretation of chemical developments in relation to building, B., 950.
- Rogers, *W. S.*, soil moisture meter depending on "capillary pull" of soil: use in fallow land and in grass and irrigated orchards, B., 917.
- Rogina, *B.*, behaviour of citric acid in boiled milk, B., 746.
- Roginskaja, *E. V.* See Suchanovskij, *S. I.*
- Roginski, *S.*, equation for kinetics of activated adsorption, A., 160.
- Rôle of adsorbed atoms in heterogeneous catalysis, A., 940.
- Mechanism of adsorption catalysis, A., 940.
- and Gopstein, *N.*, application of radioactive bromine to the investigation of the mechanism of chemical reactions, A., 1441.
- and Schechter, *A.*, chemical reactions in electrical discharges. I. Reactions of free atoms: recombination of oxygen and hydrogen atoms on metal wires, A., 1087.
- and Zeldovitch, *J.*, catalytic oxidation of carbon monoxide on manganese dioxide. I. and II., A., 942.
- See also Ablezova, *K. S.*
- Rogoff, *J. M.* See Dix, *A. S.*
- Rogov, *N.*, determination of free sulphur in rubber. II. Oxidation with permanganate, B., 162.
- Rogovin, *S.*, and Ivanova, *V.*, structure viscosity and thixotropic properties of cellulose ester solutions. I. Dependence of structure viscosity and thixotropic properties of alcohol-ether solutions of cellulose nitrate on specific viscosity, A., 1074.
- and Pazadnia, *P.*, nitration of cellulose. II. Nitration with nitric acid in presence of nitrates, B., 57.
- and Schlachover, *M.*, decomposition of cellulose in nitrating and denitrating processes, B., 1087.
- and Tichonov, *K.*, nitration of cellulose. III. Influence of oxides of nitrogen in the nitric acid, B., 299.
- Rogovina, *P. V.*, and Mebus, *O. A.*, iodometric control of mercerisation, B., 303.
- Rogozinski, *A.*, absolute determination of the local strength of X-radiation from a mass-source, A., 811.
- Rogozinski, *F.*, and Gliwczynski, *Z.*, experimental rickets. VI. Influence of magnesium salts, A., 651.

- Rohde, G., action of ammonia on the fluoran from 1-phenyl-3-methyl-5-pyrazolone, A., 1385.
- Rohde, Gustav, effect of potassium on respiration of plants, A., 1178. Nutrient requirement and symptoms of potassium deficiency of leguminous crops, B., 245.
- Rohdewald, M. See Willstätter, R.
- Rohm & Haas. See under Röhm & Haas.
- Rohmann, C., molecular solubility of one-third basic aluminium acetate, A., 695.
- Rohmer, P., Bezssonoff, N., Sacrez, R., and Stoerr, E., urinary excretion of vitamin-C, A., 546.
- Bezssonoff, N., and Stoerr, E., influence of non-alimentary factors on synthesis of vitamin-C, A., 416. Fat-soluble vitamins and synthesis of vitamin-C by the animal organism, A., 416.
- Bezssonoff, N., Stoerr, E., and Périer, J., blood- and urine-vitamin-C after injection of large amounts of vitamin-C, A., 669.
- Rohmer, R., system water-sulphuric acid-nickel sulphate, A., 1461.
- Rohn, O. von T., fuel briquettes [from waste material], (P.), B., 536.
- Rohn, W., [nickel] alloy for surgical needles, (P.), B., 107. [Nickel-iron alloy] turbine blade, (P.), B., 314.
- See also Heraeus Vacuumschmelze A.-G.
- Rohner, F. See Bernoulli, A. L.
- Rohner, L. V. See Atmospheric Nitrogen Corp.
- Rohr, M. von, history of optical glass, B., 355.
- Rohrbaugh, P. W., penetration and accumulation of petroleum spray oils in leaves, twigs, and fruit of citrus, B., 199.
- See also Quayle, H. J.
- Rohrman, E., Burget, G. E., and Williams, R. J., pantothenic acid content of animal tissues, A., 772.
- See also Williams, R. J.
- Rohrman, F. A., corrosion of metals by phosphoric acid, B., 809.
- Roiter, D. A. See Fratkan, R. L.
- Roiter, V. A., catalysis of hydrogen peroxide by platinum, A., 1209.
- and Leperson, M. G., adsorption of oxygen and catalysis of hydrogen peroxide by platinum, A., 1068.
- and Schafran, I. G., influence of sorbed gas on catalytic activity of hydrogen peroxide decomposition catalysts. II., A., 1209.
- Rojahn, C. A., and Seifert, R., determination of elementary sulphur in powder mixtures and salves, B., 724.
- and Zietan, K., stability of bleaching powder in packages and of bleaching powder preparations stored out of contact with air, B., 990.
- Rojak, S. M., utilisation of gypsum for production of sulphuric acid and Portland cement, B., 671.
- Rojas, P. See Policard, A.
- Rojek, J., rapid chemical control of balloon fabrics, B., 142.
- Rokakis, E. See Briner, E.
- Rokusho, B., acetone-butyl alcohol fermentation. VII. Amylolytic and proteolytic action of acetone bacteria. VIII. Effect of the colouring matter and tannin of kaoliang on fermentation, B., 120, 696.
- Rolfe, H. G. See Hartley, F.
- Roll, F., influence of chemical reactions on wearing of iron, B., 1097.
- Roll, F., and Pulewka, W., frictional oxidation [of metals], A., 181.
- Rolland, J., treatment of cellulose acetate [rayon] and fabrics containing it [in mercerising and dyeing], B., 302.
- Rollaston, E. C., prevention of weld decay, B., 554.
- Rolle, J. B., vegetable extract and juice, (P.), B., 923.
- and Garoni Products Co., food flavours, extracts, and juices, (P.), B., 173.
- Rollefson, G. K. See Booher, J. E., Byrns, A. C., Krauskopf, K. B., and Potts, J. C.
- Roller, D., and Wooldridge, D., photoelectric properties and electrical resistance of metallic films, A., 1446.
- See also Lasch, F.
- Roller, P. S., theory of error of acid-base titration, A., 315. Physical and chemical relations in fluid-phase heterogeneous reaction, A., 588.
- See also Berk, A. A.
- Rolleston, L. O. See Campbell, John.
- Roller, A. P., potassium borates; system $B_2O_3-K_2O$, A., 824.
- and Chung-Ming, P., system water-sodium pentaborate, A., 934.
- Rollett, A., Kunzelmann, N., and Balog, M., azo-dyes, A., 1360.
- Rollier, M. A. See Passerini, L.
- Rolling Process, Inc. See Clapp, L. R.
- Rolls Royce, Ltd. See Hall, H. C.
- Roman, W., vacate oxygen and oxidation quotient of serum. I. Determination of vacate oxygen of serum. II. Effect of diet, A., 508, 1262.
- Romanov, V. I., high-frequency discharge in gases and vapours as a source of light, A., 272.
- Romanovskaja, R. I. See Borodulin, M. V.
- Romans, I. B., prevention and removal of slime formations, (P.), B., 1077.
- Romanski, A. N., parachor of some heteropolar crystals, A., 1306.
- See also Volarovitch, M. P.
- Romantschuk, M. A. See Kireev, V. A.
- Romberg, E. See Hieber, W.
- Romell, L. G., ecological problems of humus layer in forests, B., 1106.
- Romenski, N. W., inorganic constituents of the central nervous system of rabbits with experimental rabies, A., 1527.
- Romeo, F. See Marino, S.
- Romer, W., compensational development, A., 177.
- Romet, M., synthesis of quinolinic bases from hydroxymethylene derivatives of ketones, A., 989.
- Romeyn, H., jun. See Kistiakowski, G. B.
- Romie, K. T. See Thurman, G. S.
- Romieux, C. J., Ashley, K. D., and Amer. Cyanamid Co., [organic] dithiophosphate compounds, (P.), B., 92.
- See also Christmann, L. J.
- Rompe, R. See Alterthum, H.
- Romwalter, A., and Vendl, M., determination of the grain-size distribution curve from centrifuge experiments, B., 785.
- Rona, E. See Föyn, E., and Karlik, B.
- Rónai, T., chemical nature of the so-called syphilis antigen; animal immunisation experiments, A., 886.
- Ronald, D. See Wylam, B.
- Ronceray, P., iron, even when impure, is not oxidised by pure air at saturated humidity, A., 834.
- Rondoni, P., and Corbellini, A., carcinogenic action of synthetic 1:2-benzpyrene, A., 886.
- Rondoni, P., and Pozzi, L., influence of hydrogen peroxide on precipitability of proteins, A., 1266.
- Roney, J. N., and Thomas, F. L., arsenical substitutes for controlling vegetable insects, B., 968.
- Ronzio, A. R. See Ekeley, J. B.
- Rood, A. C., and Una Welding & Bonding Co., [steel] welding electrode, (P.), B., 108.
- Rooker, W. A., treatment of tobacco, (P.), B., 381.
- Roon, J. D. van, determination of rate of combustion of gunpowder with the aid of Thring's indicator, B., 879.
- Rooney, T. B., and Stapleton, A. G., iodine method for determination of oxides in steel, B., 551.
- Roos, H. See Standard-I. G. Co.
- Roos, K., replacement of cotton linters by wood-cellulose in acetate silk manufacture, B., 623.
- Roos, W. See Mollwo, E.
- Root, F. B., and Chadeloid Chem. Co., wrinkle finish for flexible articles, (P.), B., 195. Wrinkle [alkyd] resin finish, (P.), B., 815.
- Roper, E. E., Wright, G. F., Ruhoff, J. R., and Smith, William R., construction of glass helices for fractionating column packing, A., 840.
- Ros, M., and Eichinger, A., characteristics of resistance of metals to high temperatures, B., 230.
- Rosa, E., intensity measurements on forbidden lines in spectra of alkali metals, A., 799.
- Rosa, L., ingestion of excess sodium chloride in allergic diseases, A., 1400.
- Rosanov, N. N. See Snessarev, A. P.
- Rosanov, S. N., simplified Penfield method for determination of fluorine in phosphorites and apatites, A., 1336; B., 60. Phosphorite and organic acids, B., 402. Citric acid-soluble phosphate in phosphorites, B., 493.
- Rosario, M., and Buylia, B. A., autoxidation and reduction of light fractions of a primary tar, B., 708.
- Roschen, H. L., and Newton, R. C., mechanism of autoxidation, B., 275.
- Roscoe, M. H. See Prunty, F. T. G.
- Rose, C. C., and Zachlin, A. C., low-discharge [secondary] cells, B., 1099.
- Rose, C. L., detoxification of amidopyrine by sodium amylal, A., 1410.
- See also Chen, K. K.
- Rose, C. R., weed-destroying composition, (P.), B., 1062.
- Rose, F. L. See Imperial Chem. Industries.
- Rose, F. W., jun., and White, J. D., isolation of ethylcyclohexane from a Mid-Continent petroleum, B., 1030.
- See also White, J. D.
- Rose, G. H. See Hiers, G. O.
- Rose, G. M., jun. See Marconi's Wireless Telegraph Co.
- Rose, H., and Böse, R., enrichment process for detection of small quantities of chemical constituents in minerals, A., 950.
- Rose, J. D. See Arndt, F.
- Rose, J. L., hyperfine structure of singly ionised lead, A., 272.
- Rose, L. A., use of suspensions in ore dressing, B., 457.
- Rose, M., and Berrier, H., substances functioning like the plant auxin during development of *Discoglossus pictus*, Otth., A., 1289.

- Rose, *M. E.*, and Uhlenbeck, *G. E.*, formation of electron-positron pairs by internal conversion of γ -radiation, A., 1187.
See also Roy, *A. S.*
- Rose, *M. F.* See Fielding, *W. L.*
- Rose, *R. C.*, and Cook, *W. H.*, viscosity of gluten dispersed in alkali, acid, and neutral solvents, A., 581.
See also Cook, *W. H.*, and McCalla, *A. G.*
- Rose, *R. E.*, colour: its character, perception, measurement, and reproduction, B., 721. Mechanism of dyeing, II., B., 988.
and Schmidt, *J. C.*, mechanism of dyeing paper, B., 847.
- Rose, *R. P.*, Owen, *A. F.*, and Gen. Rubber Co., treatment of fibrous material, (P.), B., 987.
- Rose, *W.* See Fischer, *H.*
- Rose, *W. C.* See Womack, *M.*
- Rose, *Downs, & Thompson, Ltd.*, and Downs, *L. H.*, presses for moisture-containing materials, (P.), B., 610.
- Rosebury, *T.*, presence of iron in enamel-keratin, A., 511.
- Karshan, *M.*, and Foley, *G.*, susceptibility of rats to dental caries. IV. Etiology of fissure caries, A., 382.
- Rosecrans, *C. Z.*, determination of carbon dioxide in the atmosphere of a closed system, A., 185.
- Rosedale, *J. L.*, and Oliveira, *C. J.*, nutritional properties of red palm oil, A., 1428.
- Rosegger, *H.*, determination of blood-sugar by the method of Creelius and Seifert, A., 1262.
- Rosell, *J. M.*, field and laboratory tests for detection of mastitis, A., 516.
- Roseman, *R.*, and Thornton, *W. M., jun.*, preparation of iron-free solutions of titanous sulphate and titanous sulphate, A., 460.
See also Katzoff, *S.*, and Thornton, *W. M., jun.*
- Rosen, *B.*, dissociation energy of the carbon monoxide molecule and the sublimation heat of carbon, A., 925, 1193.
and Désirant, *M.*, emission spectrum in selenium vapour, A., 799. Molecular spectrum of selenium vapour. I. and II., A., 799, 1291. Emission spectrum of the molecule CSe, A., 805.
- Rosen, *G.*, treatment of paper pulp, (P.), B., 448.
- Rosen, *J. S.* See Poindexter, *F. E.*
- Rosén, *M.*, moulding-black and soot, B., 534.
- Rosen, *N.*, potential energy of diatomic molecules, A., 15.
See also Manning, *M. F.*
- Rosén, *O.* See Ohlsson, *E.*
- Rosen, *R.* See Standard Oil Development Co.
- Rosen, *S. H.* See Marine, *D.*
- Rosenberg, *A.* See Auger, *P.*
- Rosenberg, *A.* (Giessen). See Kroll-pfeiffer, *F.*
- Rosenberg, *G.*, extraction of carotene from carrot juice, A., 422.
- Rosenberg, *J. E.*, and Enamellers Guild, Inc., manufacture of enamel ware, (P.), B., 902.
- Rosenberg, *S.* See Steacie, *E. W. R.*
- Rosenberg, *S. J.*, and Jordan, *L.*, influence of oxide films on wear of steel, B., 26.
- Rosenberg, *T.* See Lutenberg, *C.*
- Rosenblad, *C. F.*, plate heat exchangers for fluids, (P.), B., 786.
- Rosenbloom, *D.*, cholesterol of maternal and foetal blood at conclusion of pregnancy, A., 1392.
- Rosenblüh, *R.*, harmful nitrogen in sugar beet, B., 168.
- Rosenblum, *C.*, and Kaiser, *E. W.*, storage of polonium solutions, A., 1075.
See also Kolthoff, *I. M.*
- Rosenblum, *L.*, coating composition, (P.), B., 736. Polyhydric alcohol-carboxylic organic acid-weak polybasic inorganic acid-phenol-aldehyde condensation product, (P.), B., 736.
- Rosenblum, *L. A.*, surface inactivation of catalase, A., 896.
- Rosenbohm, *A.* See Bierich, *R.*
- Rosenbohm, *E.* See Jaeger, *F. M.*
- Rosenburg, *H. R.* See Reichstein, *T.*
- Rosenbusch, *R.*, and Reverey, *G.*, powdered phosphatide preparations, (P.), B., 1166.
- Rosencrants, *F. H.*, construction problems associated with high-pressure boilers for the pulp and paper industry, B., 719.
- Rosendahl, *F.*, increasing yield of benzol from coke ovens, B., 581.
- Rosene, *H. F.*, summation of [plant] cell c.m.f., A., 1288.
and Lund, *E. J.*, linkage between output of electrical energy by polar tissues and [plant] cell oxidation, A., 904.
- Rosenfeld, *L.* See Chandrasekhar, *S.*
- Rosenfeld, *M.* See Marshall, *E. K., jun.*
- Rosenfeld, *S.*, and Wiener, *A. S.*, determination of plasma-fibrin, A., 1394.
- Rosenhall, *G.*, X-ray and electrical investigation of Pd-Ag-H alloys, A., 1456.
- Rosenheim, *M. L.*, mandelic acid in treatment of urinary infections, A., 887.
- Rosenheim, *O.*, and King, *H.*, constitution of calciferol (vitamin-D), A., 1120.
and Webster, *T. A.*, precursors of coprosterol and bile acids in the animal organism, A., 1407.
- Rosenstein, *L.*, and United Verde Copper Co., recovery of sulphur, (P.), B., 100, 1093. Reduction of sulphur dioxide, (P.), B., 1093.
See also Hund, *W. J.*, and Shell Development Co.
- Rosenthal, *A.* See Walbaum, *H.*
- Rosenthal, *E.*, and Erdélyi, *J.*, colour reaction of vitamin-A, A., 1428.
and Patai, *J.*, anti-haemolytic action of liver extract, A., 881.
and Szilárd, *C.*, determination of vitamin-A in blood, A., 792.
and Weltner, *M.*, spectrophotometry of vitamin-A colour test, A., 792.
- Rosenthal, *F.*, Friedheim, *I.*, and Nagel, *R.*, destructive action of erythrocytes on insulin, A., 538.
- Rosenthal, *H.*, production of town's gas from water-gas, B., 756.
- Rosenthal, (*Miss*) *J. E.*, vibrations of symmetrical tetrameter molecules, A., 432. Intensities of vibration rotation bands, A., 913.
See also Salant, *E. O.*
- Rosenthal, *S. M.*, chemotherapy. I. Action of sodium formaldehydesulphoxylate in bacterial infections, A., 109.
- Rosenthal, *S. R.*, atherosclerosis, chemical, experimental, and morphologic: rôles of cholesterol metabolism, blood-pressure, and structure of the aorta; fat angle of the aorta (F.A.A.) and the infiltration-expression theory of lipin deposit, A., 649.
- Rosenthal, *W.* See De Jongh, *S. E.*
- Rosenthaler, *L.*, crystal precipitation by salting out. II., A., 1140. Microchemical contributions. XII., A., 1474.
- Rosenzweig, *J.* See Fichter, *F.*
- Roshdestvenski, *B. A.*, chlorination of calcium phosphate, B., 848.
- Roshdestvenski, *V. N.*, caesium photoelements sensitised by sulphur, A., 722.
See also Volfson, *B. N.*
- Rosin, *Jacob*, rectifying column with continuous progressive cooling of the vapour, (P.), B., 4.
- Rosin, *Joseph*. See Bliss, *A. R., jun.*
- Rosin, *P.*, and Fehling, *R.*, temperature-viscosity relations of coal ashes, B., 211.
and Kayser, *H. G.*, dynamic law of combustion, B., 390.
and Rammler, *E.*, grain size in grinding, B., 657.
- Rosin, *S.*, and Rabi, *I. L.*, effective collision cross-sections of alkali atoms in gases, A., 1295.
- Rosiński, *S.* See Swientoslawski, *W.*
- Roskam, *J.*, and Comhaire, *S.*, lecithin, kephalin, and duration of hæmorrhage, A., 244.
- Rosljakova, *E. N.* See Krauze, *K. E.*
- Ross, *A. F.*, effect of proteoclastic enzymes on purified preparations of tobacco mosaic virus, A., 798.
- Ross, *C. S.*, rôle of volatiles in formation of Virginia titanium deposits, A., 322.
and Kerr, *P. F.*, halloysite and allophane, A., 322.
- Ross, *E. M.* See Sheen, *R. T.*
- Ross, *H. B.*, separating and extracting apparatus, (P.), B., 578.
- Ross, *H. L.*, and Sehl, *P. W.*, determination of free silica; modified petrographic immersion method, A., 317.
- Ross, *J. R.*, and Lucas, *C. C.*, determination of minute amounts of lead in urine, A., 1525.
- Ross, *P. A.*, and Kirkpatrick, *P.*, weak X-ray lines of niobium and antimony, A., 3.
See also Kirkpatrick, *P.*
- Ross, *R. F.* See Swearingen, *L. E.*
- Ross, *S. W.*, purification of zinc sulphate solutions intended for electrolytic recovery of zinc, B., 460.
- Ross, *W. E.* See Bull, *B. A.*
- Ross, *W. F.* See Bergmann, *M.*
- Ross, *W. H.*, Beeson, *K. C.*, White, *L. M.*, and Merz, *A. R.*, loss of available potash in extraction of mixed fertilisers, B., 741. Loss of water-soluble potash in fertiliser mixtures, B., 1060.
See also White, *L. M.*
- Ross Heater & Manufacturing Co., Inc. See Davis, *F. K.*, and Graham, *H. M.*
- Rossati, *G. M.*, artificial wool, (P.), B., 668.
- Rossée, clarification of sugar solutions [for analysis] with bone charcoal and carboraffin, B., 119.
- Rossem, *A. van*, plastic and elastic properties of rubber, B., 70, 418. Perishing of rubber under atmospheric influences, B., 162.
- Rossi, *Alessandro*, mammalian lipins. IX. Enzymic fission of liver-polydiaminophosphatide, A., 534.
and Sapegno, *E.*, blood-sugar, reducing power, and glutathione content at high altitudes, A., 529.
See also Klein, *W.*

- Rossi, *Armando*, system praseodymium-gold, A., 23. Crystal structure of LaMg and CeMg, A., 151. Crystal structure of PrSn_3 and PrPb_3 , A., 152. Crystal structure of LaTi_3 , A., 433.
- Rossi, *B.*, directional measurements on cosmic rays near the geomagnetic equator, A., 1297.
- and *Alceo, G.*, influence of filtration on properties of [cosmic] radiation which produces showers [of secondary particles], A., 679.
- and *De Benedetti, S.*, secondary effects of cosmic radiation below a water screen, A., 804. New component of cosmic radiation, A., 804.
- Rossi, *G.*, theory of bacterial activity in agricultural soils, B., 1059.
- Rossi, *J.*, Madagascar coffees, B., 44.
- Rossi, *O. A.*, stabilisation of injectable sodium thiosulphate solution, B., 653.
- Rossichin, *V.*, and *Timkovski, V. P.*, influence of high-frequency field on combustion of an acetylene-air mixture, A., 831.
- See also *Malinowski, A. E.*
- Rossier, *P.*, comparison of atmospheric extinction in the ultra-violet and visible spectrum, A., 424. Spectral type of some stars of type A, A., 800. Ratio of widths of the $\text{H}_\epsilon + \text{H}$ and K lines in stellar spectrograms, A., 800. Variation of relative width of stellar hydrogen lines with spectral type, A., 800. Variation of relative width of stellar calcium and hydrogen lines with spectral type, A., 800.
- Rossignoli, *G.* See *Losana, L.*
- Rossikhim. See under *Rossichin.*
- Rossini, *F. D.*, development of thermochemistry, A., 1323.
- Rossinskaja, *I. M.* See *Korshev, P. P.*
- Rossmann, *B.*, detection of hexamethylenetetramine in fish conserves, B., 427.
- Rossmann, *E.*, titrimetric determination of iodine values [of unsaturated hydrocarbons] with bromine vapour, A., 728.
- Rosso, *C.*, variation in blood-calcium fractions caused by adrenaline, A., 258.
- Rossouw, *S. D.*, and *Wilken-Jorden, T. J.*, origin of sulphur in wool. II. Cuprous mercaptide method for the determination of cystine or cysteine, A., 376.
- Rost, *A.* See *Terres, E.*
- Rost, *F.*, occurrence of optical asymmetry, A., 324.
- Rostagni, *A.*, positive and neutral rays. I. Neutralisation of positive rays. II. Liberation of electrons from metallic surfaces, A., 274.
- Rostkovski, *A. P.*, double decomposition in absence of a solvent. XXVI. Mutual system $\text{Ba}(\text{NO}_3)_2 + 2\text{KCl} \rightleftharpoons \text{BaCl}_2 + 2\text{KNO}_3$, A., 168.
- Rostler, *S. F.* See *Mehner, V.*
- Rostosky, *L.*, quick-setting [cellulosic] cements, (P.), B., 684.
- Rotblat, *J.*, induced radioactivity of nickel and cobalt, A., 1297.
- See also *Danyasz, M.*, and *Herszfinkel, H.*
- Rotermel, *A.*, camphor from *Ocimum canum*, B., 523.
- Rotermund, *M. A.* See *Union Carbide & Carbon Research Labs.*
- Roth, *C.*, damping-off of tap roots of pines, B., 567.
- Roth, *Emery*, and *Spira, L.*, depilatory soap, (P.), B., 1003.
- Roth, *Erzsébet*, and *Sehay, G.*, highly-attenuated flames of potassium and iodine vapours, A., 708.
- Roth, *F. L.*, and *Bartunek, P. F.*, Zeeman effect in arc spectrum of cobalt, A., 675.
- Roth, *H.* See *Brockmann, H.*
- Roth, *J. F.* See *Wöhler, L.*
- Roth, *K.*, water-soluble organic silver compound, (P.), B., 973.
- Roth, *W.*, diffusion of gases, A., 692.
- Roth, *W. A.*, recent advances in calorimetry and thermometry, A., 319. Thermodynamics of system sulphur dioxide-water, A., 935.
- Meichsner, A.*, and *Richter, Helmut*, approximate value for heat of formation of an iron phosphide $[\text{Fe}_2\text{P}]$, A., 304.
- and *Meyer, Ingr.*, heats of fusion and transformation of 1:4-dioxan, A., 690.
- See also *Becker, G.*, and *Zeumer, H.*
- Rothberger, *C. J.* See *Goldenberg, M.*
- Rothé, *E.*, and *Stoeckel, F.*, radioactivity of geological layers of the Rhine valley, A., 190.
- Rothemund, *P.*, formation of porphyrins from pyrrole and aldehydes, A., 1510.
- McNary, R. R.*, and *Inman, O. L.*, occurrence of decomposition products of chlorophyll. II. Decomposition products of chlorophyll in stomach walls of herbivorous animals, A., 110.
- Rothén, *A.* See *Levene, P. A.*
- Rothfuchs, *G.*, particle-size distribution of cement, B., 902.
- Rothgarn, *A. E.*, and *Clow, S. C.*, separating materials of [widely] different sp. gr., (P.), B., 1075.
- Rothlin, *E.*, pharmacological properties of a new alkaloid from ergot of rye; ergobasine, A., 1274.
- and *Raymond-Hamet*, comparison of the utero-adrenalinolytic activity of corynanthine, yohimbine, and ergotamine, A., 397. Toxicity and sympathetic-inhibitory action of corynanthine, A., 894.
- Rothschild, *F.*, step-photometric determination of phosphorus by the method of Fiske and Subbarow, A., 596.
- and *Staub, H.*, influence of thyrotropic hormone on blood- and organ-fats and -lipins, blood-sugar, diuresis, and excretion of sodium chloride and urea in rabbits, A., 790.
- Rothschild, *S.*, coloration of calcium sulphide phosphors by light, A., 457.
- Rothstein, *B.*, odour and constitution; α -substituted γ -butyrolactones, A., 474. Thermal decomposition of γ -phenoxy- α -oxido- β -methylbutyric acid, A., 744.
- Rotini, *O. T.*, catalytic conversion of cyanamide into carbamide, A., 456.
- and *Neuberg, C.*, specificity of phosphatases; hydrolysis of phospholactic acid by phosphatase, A., 1280.
- Rotondaro, *P. A.*, determination of alkaloidal salts by direct titration of their acid radicals, A., 1141.
- Rotta, *J.*, treatment of textile goods, (P.), B., 946.
- Rottensten, *K. V.*, and *Maynard, L. A.*, assimilation of phosphorus from di- and tri-calcium phosphate, bone dicalcium phosphate, and cooked bone meal, A., 393.
- Rottig, *W.*, synthesis of "ancient purple," A., 359.
- Rouault, *E.*, aqueous emulsions of bitumen, pitch, or tar, (P.), B., 88. Treatment of natural or artificial bitumen, asphalt, and similar products, (P.), B., 260. Treatment of bitumen, pitch, tar of various origins, and their mixtures, (P.), B., 260.
- Roubault, *M.*, origin of the crystalline slates of Kabylie de Collo (Department of Constantine, Algeria), A., 323. Chemico-mineralogical characters of the tertiary eruptive rocks of Kabylie de Collo (Dept. of Constantine, Algeria), A., 843.
- Rouette, *P. L.* See *Stirm, K.*
- Roughton, *F. J. W.* See *Ferguson, J. K. W.*
- Roule, *L.*, toxicity to river fish of hydrocarbons in industrial effluents, B., 1072.
- Roulland, *A.*, dissolving and extracting devices, (P.), B., 51.
- Ronleau, *J.*, mechanism of photo-potential of sheets of oxidised copper, A., 585.
- See also *Audubert, R.*
- Rounov, *Z. D.*, and *Jackson, H. C.*, influence of metals on flavour of condensed-milk products, B., 1066.
- Rouse, *A. H.* See *Kertesz, Z. I.*
- Rousseau, *E.*, enzymic activity of phosphatase of cobra venom, A., 122.
- Rousseau, *J.*, rôle of riparian plants in formation of argillaceous concretions, A., 1479.
- Roussel, *G.*, and *Gruzewska, Z.*, calcium in foetal liver of calf in embryonic development, A., 243.
- See also *Gruzewska, Z.*
- Rousset, *M. B.*, and *Keller, A. V.*, solid, opaque, or transparent [urea-formaldehyde] condensation products, (P.), B., 1056.
- Roussinov, *L.* See *Kurtschatov, B. V.*
- Roussy, *G.*, and *Mosinger, M.*, yellow pigment of thalamo-subthalamie region, A., 233.
- Routala, *O.*, natural gas in Tyrnävä, A., 600.
- and *Arho, A.*, preparation of a fat-soluble azo-dye. I. Dye from stearic acid, A., 969.
- and *Jaatinen, I.*, bleaching of paper pulp, B., 95.
- and *Pohjala, A.*, origin of cymene in sulphite boiling [of pulp], B., 16.
- and *Pullinen, E.*, fat-soluble azo-dyes. II. Dyes from palmitic acid, A., 1232.
- Routledge, *D.* See *Irvine, (Sir) J. C.*
- Rouvé, *A.* See *Stoll, M.*
- Roux, *H.* See *Chevallier, A.*
- Roux, *J.*, protection of metal structures with bituminous aluminium paints, B., 509.
- Roux, *J. C.* See *Simon, T.*
- Rouyer, *E.* See *Bourion, F.*
- Rovira, *A.*, permanence of galvanos and stereotypes, B., 637.
- Row, *G. R.* See *Sastri, B. N.*
- Rowaan, *P. A.*, determination of rotenone in derris root, B., 573. Chemical determination of the value of plant material (derris root, *Lonchocarpus* root, etc.), containing rotenone, B., 606. Citronella oil, B., 1118.
- and *Koolhaas, D. R.*, determination of citronellal in Java citronella oil, B., 782.
- Rowden, *W. F.*, steel-making alloys, B., 360.
- Rowe, *A. W.*, energy requirement of an acromegalic giant, A., 235.
- Rowe, *F. M.*, and *Allen, R. L. M.*, preparation and properties of *m*- and *p*-amino-azo-derivatives of β -naphthol and of β -hydroxynaphthoic arylamides, A., 1360.

- Rowe, F. M., and Giles, C. H., hydrolysis of members of the naphthol AS series with sulphuric acid, B., 893. Action of boiling caustic soda (kier-boiling) on insoluble azo-colours on the fibre. III. Colouring matters derived from arylamides of β -hydroxynaphthoic acid and containing a nitro-group or groups, B., 988.
- Jambuserwala, G. B., and Partridge, H. W., reaction of diazo-sulphonates from 2-naphthol-1-sulphonic acid. XII. Preparation of phthalazine, phthalazone, and phthalamidine derivatives of 2-bromo-4-nitroaniline, A., 1253.
- Rowe, H. See Harrison, E. P.
- Rowell, G. S. See Multigraph Co.
- Rowland, B. W., colloidal aspects of cellulose, B., 1087.
- Rowland, E. S., and Upthegrove, G., equilibrium relations in the copper corner of the ternary system copper-tin-beryllium, A., 1066.
- Rowland, G. E. See Jones, H. G.
- Rowlands, I. W., and Callow, R. K., stability of international standard of oestrus-producing hormone in alcoholic solution, A., 666.
- Rowledge, H. P., determination of ferrous iron in refractory silicates, B., 949.
- Rowntree, L. G., Clark, J. H., and Steinberg, A., biological effects of thymus extract (Hanson), A., 1170.
- Rowsell, E. A. See Folley, S. J.
- Rowsey, G. L., sweetening [of hydrocarbons oils], (P.), B., 136.
- Roy, A. S., and Rose, M. E., rotational dispersion of sound in hydrogen, A., 923.
- Roy, G. H., metallised sheets [of cellulose material], (P.), B., 624.
- Roy, (Mlle.) M. See Boutaric, A., and Piettre, M.
- Roy, M. F. See Copenhauer, J. W.
- Roy, N. K. See Ghosh, J. C.
- Roy, R. K. D. See Hoffmann, H.
- Roy, S. N., volumetric determination of lead, A., 1473.
- Roychoudhury, S. See under Raychoudhury, S.
- Royds, T., oxygen in the sun's chromosphere, A., 1437.
- Royen, H. J. van, Grewe, H., and Quandt, K., examination of steel-works tar, B., 708.
- Royer, G. L. See O'Leary, W. J.
- Royer, L., orientation of lead chloride and bromide by muscovite mica, A., 570. Preparation of thin single crystals of silver and their investigation with electron beams, A., 922.
- Royer, M., determination of urobilin, A., 379.
- Royer, M. B. See Herty, C. H., jun., and Leaver, E. S.
- Roys, H. C. See Hassler, E. L.
- Rozanov, S. N. See under Rosanov, S. N.
- Rozanova, V. See Sadikov, V. S.
- Rozeboom, J., morphine reaction with iodic acid in papaverine hydrochloride, A., 769. Reaction for differentiating chloroform and carbon tetrachloride, A., 958. Citronella oil, B., 924.
- Rozema, C. E., and Haskelite Manufg. Corp., treatment of glue, B., 470.
- Rozenberg, A. See Palladin, A. V.
- Rozenberg, S., vulcanisation of moulding rubber sole, B., 1006.
- Rozenberger, N. A., and Larin, P. S., effect of cooking and bleaching on properties of straw cellulose, B., 445.
- Rozenberger, N. A., Rabinovitch, R. V., and Frenkel, K. Y., volumetric determination of pentosans with bromine, B., 445.
- Rozenblumówna, S. See Weil, S.
- Rozenbroek, M. D. See N. V. Chem. Fabr. "Servo."
- Rozenman, M. A. See Orlov, N. N.
- Rozinek, A. See Szkla, G.
- Rozler, V. See Perelman, S. S.
- Rozov, L. P., changes in solonetz soils under irrigation, B., 71.
- Rschewkin, S. N., and Ostrovski, E. P., preparations of emulsions and colloidal solutions by ultra-sonic waves, A., 1073.
- Ruark, A. E., α -particle spectra and the Geiger-Nuttall law, A., 1440. α -, β -, and γ -rays of the actinium family, A., 1440.
- and Fussler, K. H., half-lives of potassium, rubidium, neodymium, and samarium, A., 1185.
- and Maxfield, F. A., X-ray levels of radioactive elements with applications to β - and γ -ray spectra, A., 273.
- Rubanik, M. See Finkelstein, V. S.
- Rubber Producers Research Association, Bloomfield, G. F., and Farmer, E. H., treatment of rubber, (P.), B., 962.
- Martin, G., Davey, W. S., and Baker, H. C., rubber, (P.), B., 776.
- Martin, G., Davey, W. S., and Lindsell-Stewart, L., concentration of [rubber] latex, (P.), B., 1006.
- Martin, G., Davey, W. S., and Sharpley, T. A., rubber and road-tar mixtures, (P.), B., 644.
- Schidrowitz, P., and Redfarn, C. A., [chlorinated] rubber derivatives, (P.), B., 370.
- and Stevens, H. P., purification and concentration of [rubber] latex, (P.), B., 776.
- See also Macbeth, C.
- Rubber Research Institute of Malaya, concentration of [rubber] latex, (P.), B., 776.
- Rubber Service Laboratories Co., production and use of compounds suitable as vulcanisation accelerators [for rubber], (P.), B., 280, 322. Rubber vulcanisation, (P.), B., 280. [Accelerators for] rubber vulcanisation, (P.), B., 1155.
- See also Christensen, Chester W., Fentress, J. H., Harman, M. W., Ingram, J. R., Moore, W. A., Scott, W., Sibley, R. L., and Tompkins, D. H.
- Rubek, D. D., and Dahl, G. W., evaporation-rate method applied to petroleum thinners, B., 54.
- Rubekina-Goer, A. M., pulping of straw at temperatures up to 100°, B., 221.
- Rubel, L. N. See Sadikov, V. S.
- Ruben, S., and Sirian Lamp Co., electric lamp and filament therefor, (P.), B., 363. [Electric] lamp filament, (P.), B., 911.
- See also Eastman, E. D.
- Rubens, E., use of native raw materials in place of cotton in preparation of nitro-celluloses, B., 16.
- Rubenstein, B. B., effect of salt and sugar solutions on water exchange through the skin of frogs, A., 1012.
- Rubenstein, L. See Imperial Chem. Industries.
- Ruberg, L. A., and Shriner, R. L., local anæsthetic action of dialkylaminoethoxyethyl *p*-aminobenzoates, A., 1363.
- Rubin, B. A., and Naumova, L. I., enzymic activity as a characteristic of [plant] variety, A., 658. Determination of [the concentration of] enzymes, A., 1535.
- Rubin, E. L. See Harris, I.
- Rubin, F. See Landauer, W.
- Rubin, M. M., [paper]-sheet formation on Fourdrinier wire, B., 943.
- Rubin, T. R. See Gucker, F. J., jun.
- Rubino, M. C., lipin antigens of organs in sero-diagnosis; new antigen of sero-flocculation in leprosy, A., 237.
- See also Varela-Fuertes, B.
- Rubinstein, A. M. See Tscherniaev, I. I.
- Rubinstein, D. L., Lvova, V., and Burlakova, H., sodium and calcium requirements of the animal organism (*Drosophila*), A., 1017.
- Rubinstein, H. S., inactivation of growth hormone. I. Inadequate refrigeration. II. Exposure to air, A., 259.
- and Fox, L. M., water and solid content of the brains of albino rats treated with the growth hormone, A., 666.
- Rubinstein, M., spleen and experimental hyperthermia, A., 1159.
- See also Passek, V.
- Rubzov, M. V. See Magidson, O. J.
- Ruchhoff, C. C., longevity of *B. typhosus* (*Eberthella typhi*) in sewage sludge, B., 208.
- and Norton, J. F., selective media for *colibacillus* isolation [from water], B., 1071.
- Rudakova, E. F. See Nametkin, S. S.
- Rudakova, N. See Pigulevski, V.
- Rudberg, E., vapour pressure of calcium between 500° and 625°, A., 22.
- and Lempert, J., vapour pressure of barium, A., 1454.
- Ruddies, G. F., motor-fuel lubricating and anti-knock materials, (P.), B., 892.
- Ruddock-West, T., clean milk supply, B., 921.
- Rudenko, N. S., and Schubnikov, L. V., viscosity of liquid nitrogen, carbon monoxide, argon, and oxygen, and its dependence on temperature, A., 1064.
- Rudenko, V. V. See Tarasov, B. K.
- Ruder, W. E., influence of grain size on magnetic properties, A., 687.
- See also General Electric Co.
- Rudge, E. A., wood decomposition, B., 229. Decay of wood and formation of coal, B., 592. Decay of wood in relation to humification, B., 903.
- and Lewis, H., old timbers. I. II. Romano-British, B., 456, 806. Mechanism of decay of wood. II., B., 1045.
- Rudic, J., quantity and nature of gases evolved, under action of heat and reduced pressure, from Rumanian coals; classification, B., 292.
- Rudnev, N. A., precipitation of barium sulphate in presence of chloride and bromide ions, A., 1473.
- Rudnitzki, Z., volumetric determination of tannides with chromic acid, B., 71. Determination of insoluble matter in tanning solutions by the centrifuging method, B., 419. Qualitative analysis of tanning substances, B., 419.
- Rudolf, E. See Mecheels, O.
- Rudolfs, W., chlorination of sewage, B., 383.
- Brendlen, J. H., and Carpenter, W. T., filtration of settled sewage, B., 1071.
- and Henkelekan, H., relation between drainability of [sewage] sludge and degree of digestion, B., 208.

- Rudolfs, W., and Miles, H. J., high- and low-temperature [sewage-sludge] digestion experiments. I. Operation and seeding, B., 927.
- and Trubnick, E. H., activated carbon in sewage treatment, B., 1120.
- Ziembra, J., and Gehn, H. W., effect of chlorine dosage on percentage reduction of *B. coli* [in sewage], B., 208.
- Rudy, H., separation of haptens by adsorption on inorganic colloids, A., 105. Enzymic esterification of lactoflavin with phosphoric acid, A., 1035.
- See also Kuhn, R.
- Rue, J. D., bleaching chemical wood pulps, B., 1136.
- Ruebenbauer, H., adulteration of arachis oil with coconut oil, B., 509.
- Rüber, A. See Wegler, R.
- Rueckel, W. C., physical properties of insulating brick, B., 356.
- and Duecker, W. W., plasticised sulphur as a jointing material for clay products, B., 1143.
- See also Everhart, J. O.
- Rüdiger, M., examination of fortified wine ["Brennwein"], B., 169.
- Rüdröf, W., and Hofmann, U., crystal structure of chromium, molybdenum, and tungsten hexacarbonyls, A., 686.
- Ruedy, J. E., and Gibbs, R. C., arc spectrum of selenium, A., 136, 799.
- Rühenbeck, A. See Tammann, G.
- Rühl, A., significance of lactic acid in heart metabolism, A., 1017.
- Ruehle, A. E., crystalline vitamin-B₁. XIII. Ultra-violet absorption of some derivatives of the basic cleavage product and their synthetic analogues, A., 1510.
- See also Williams, R. R., Wintersteiner, O., and Wooten, L. E.
- Ruehle, G. D. See Kuntz, W. A.
- Rühling, I. See Keil, W.
- Rülke, K. See Lockemann, G.
- Ruemele, T., neutral lard production, B., 275. Fat of flour, B., 746. Order of magnitude of wheat-gluten particles in the colloidal condition, B., 921.
- Ruemelin, R., gas purifier, (P.), B., 5.
- Rümmler, W. See Lüers, H.
- Ruesch, A. See Rathgeber, F.
- Ruess, H. See Gorbach, G.
- Rüter, R., treatment of flour, (P.), B., 572.
- Rütgerswerke Akt.-Ges., ferric oxide catalysts [for production of hydrogen from steam and carbon monoxide], (P.), B., 226.
- and Kahl, L., phenol, (P.), B., 621.
- Ruf, H. W., Warrick, L. F., and Nichols, M. S., malt-house waste treatment studies in Wisconsin, B., 928.
- Rufener, J. P. See Fierz-David, H. E.
- Rufert Chemical Co. See Heineken, W. R.
- Ruff, A., formation and de-gelling of gelled tung oil, B., 1149.
- Ruff, H. R. See British Thomson-Houston Co.
- Ruff, O., formation and dissociation of silicon carbide, B., 1094.
- and Kwasnik, W., fluorination of nitric acid; nitroxyfluoride, NO₂F, A., 715.
- and Miltzschitzky, G., carbonyl fluoride COF₂, A., 180.
- Ruffini, V. See Rabbeno, A.
- Ruffy, J., evaluation of lemon vinegar, B., 569.
- Ruggles, A. C. See Kodak, Ltd.
- Ruggles-Brise, H. R., mica-covered papers, (P.), B., 625.
- Ruggli, P., determination of substantivity of dyes, B., 19.
- and Benz, H., reactions of artificial organic dyes permitted as colours for foodstuffs, B., 540.
- Bussemaker, B. B., and Müller, Wilhelm, indoles and isatogens. XVII. Benzodipyrroles. II. Two oxindoles of the benzodipyrrole series, A., 759.
- and Jensen, P., adsorption and dyeing processes. XII. Chromatographic adsorption analysis as applied to aqueous solutions of synthetic organic dyes, B., 586.
- and Schmid, O., isatogens and indoles. XVI. 4:6-Dinitroisophthalic acid and products of condensation of dinitroxylylene and aldehydes. XIX. Transformation of *o*-aminated tolans or stilbenes into derivatives of indole or indoline. XX. Aminated double stilbenes, A., 619, 1505.
- and Staub, A., isatogens and indoles. XV. *m*-Phenylenediacrylic acid, A., 83.
- Stoll, A., and Walker, O., tests for natural organic pigments added to foodstuffs, B., 521.
- and Zaeslin, H., acetylene derivatives. IX. Catalytic hydrogenation of *oo'*-dinitrotolane, A., 1118. Indoles and isatogens. XVIII. Preparation of a vat dye from *oo'*-dinitrotolane and its conversion into di-indole, A., 1133.
- Ruguzov, A. M. See Antonov, L. I.
- Ruhemann, B., temperature variation of the lattice constants of manganous oxide, A., 1307. X-Ray camera for low temperatures, A., 1340.
- and Ruhemann, M., anomalous specific heats, A., 437.
- Ruhemann, M., and Likhter, A., phase diagrams of low-melting mixtures. I. The system methane-ethylene, A., 447.
- See also Prichotko, A., and Ruhemann, B.
- Ruhkopf, H., antineuritic vitamin from yeast, A., 1286.
- See also Mischeel, F.
- Ruhnau, A. See Thiel, K.
- Ruhoff, J. R., Burnett, R. E., and Reid, E. E., preparation of higher aliphatic bromides, A., 193.
- See also Kistiakowski, G. B., and Roper, E. E.
- Ruhrchemie Akt.-Ges., delivering liquefied gases, (P.), B., 482.
- Ruibak, B. M., and Blumien, I., analysis of lubricating oil acid sludge, B., 392.
- and Makushinskaja, N. S., rapid determination of acidity of dark petroleum products, B., 86.
- Ruabin, S. I. See Rakovski, V. E.
- Ruiz, A. S. See Collazo, J. A., and Torres, I.
- Rule, H. G., and Cunningham, J. P., solvent action. X. Rotatory powers of dimethylene tartrate, methylene-tartaric acid, and its dimethyl ester in the presence of added solvents and salts, A., 1192.
- and Dunbar, A., solvent action. XI. Influence of solvent, concentration, and temperature on the rotatory powers of *l*-menthyl *o*-substituted benzoic esters, A., 1192.
- Pursell, W., and Barnett, A. J. G., 1:9-benzanthrone-8-carboxylic acid and dibenzanthronedicarboxylic acid from 8-bromo-1-naphthoic acid, A., 859.
- Rule, H. G., and Turner, H. M., reactivity of *peri*-substituted naphthalenes. III. Further synthetic reactions of 8-halogeno-1-naphthoic acids, A., 618. Optical resolution of phenyl 8-carboxy-1-naphthyl sulphoxide; prediction of restricted rotation in *peri*-substituted naphthalenes, A., 618.
- See also Bigelow, L. A.
- Rulla, N. V., and Hess, B. A., solubility of sulphur in blast-furnace slags as a function of composition and temperature of the latter, B., 498.
- Rumboldt, T., calculating tables for gauging volume of beer wort by the Erhard-Schau measuring instrument, B., 249.
- Rumer, G., wave theory of the neutrino, A., 143.
- See also Markov, M.
- Rumford Chemical Works. See Edwards, Robert Seaver, and Fiske, A. H.
- Rumpel, H. H., gyratory crusher, (P.), B., 1074.
- and Smith Eng. Works, crusher, (P.), B., 50, 177.
- Rumpel, W. See Gangl, J.
- Rumpelt, H. See Hollenweger, M.
- Rumpf, (Mme.) M. E. P., pertitanates and pervanadates, A., 313.
- Rumpf, P., relationship between absorption and valency in the chemistry of organic colouring matters; halochromic dyes, A., 857. Schiff colour reaction of aldehydes, A., 962.
- See also Freymann, (Mme.) M.
- Rund, O., obtaining the soil solution by water displacement, as compared with the natural expressed solution by von Wrangell's method, B., 372.
- Runnström, J., and Michaelis, L., correlation of oxidation and phosphorylation in haemolysed blood in presence of methylene-blue and pyocyanine, A., 1023.
- See also Michaelis, L.
- Rupe, H., and Engel, K., catalytic hydrogenation of benzoylmandelonitrile and of amygdalin, A., 1363.
- Hirschmann, H., and Werdenberg, H., preparation of 8-phenyl- β -methyl-n-valeraldehyde, A., 747.
- and Lenzlinger, M., catalytic reduction of both hydroxymethylenecamphor benzoates; second camphorylcarbinol, A., 625.
- and Werdenberg, H., products of the transformation of acetylenic carbinols; constitution of the compounds derived from phenylethylmethyl-ethinylcarbinol, A., 745.
- See also Konek, F.
- Rupilius, K. See Berzaczy, T.
- Rupp, E., artificially excited positrons, A., 139, 274. Experiments with positrons, A., 139. Structure investigations of interfaces by means of X-rays and electrons, A., 161.
- See also Gen. Electric Co.
- Rupp, H., and Bickenbach, W., effect of posterior pituitary hormone on water and chlorine excretion of the pregnant organism with reference to hormonal theory of origin of eclampsia, A., 259.
- See also Bickenbach, W.
- Rupp, V. R., canned meats; effect of p_{H_2} on formation of ferrous sulphide, B., 1020.
- Ruppert, V., micro-determination of biological carbon, especially of residual carbon in blood, A., 674, 1393.

- Ruppert, V. See also Bürger, M.
- Ruppol, E., ultra-violet absorption spectra of fumaric, maleic, mesaconic, and citraconic nitriles, A., 563.
See also Castille, A.
- Ruprecht, R. W. See Blackmon, G. H., and Coleman, J. M.
- Rus, G. See Naves, Y. R.
- Rusanov, A. K., preparation of spectrally pure carbon electrodes, B., 789.
- Ruschig, H. See Slotta, K. H.
- Ruschmann, G., importance of acidification in preparation of silage, B., 699.
and Duncker, L., ensilage of lucerne with various phosphoric-hydrochloric acid mixtures, B., 326.
and Meyer, W., behaviour towards acids of coliform bacteria occurring on green plants, A., 536.
- Rusiecki, S. See Konarzewski, J.
- Rusinov, L. I., determination of the resistance of carborundum by the eddy-current effect, A., 683.
See also Kurtschatov, I. V.
- Ruska, H., manometric determination of oxygen uptake and carbon dioxide evolution of tissue sections, A., 109.
and Oestreicher, T., metabolism of isolated fat-tissue. I. Tissue of normal and starved animals, A., 114.
and Quast, A., metabolism of isolated fat-tissue. II. Dependence on body-weight, growth, and nature of food, A., 1408.
See also Wetzel, R., and Wollschitt, H.
- Russ, E. F., induction furnace without molten metal movement suitable for melting of light metals, A., 319. Electrical melting of aluminium, B., 232.
- Russel, M. See Purrr, A.
- Russell, A., Todd, J., and Wilson, Cecil L., constitution of tannins. IV. Absorption spectra of natural phlobatannins and synthetic flavipinacols, A., 218.
- Russell, A. G. See Bell Telephone Labs.
- Russell, A. S., Kennedy, T. R., and Lawrence, R. P., intermetallic compounds formed in mercury. V. Compounds in the Zn-Mn, Zn-Co, Zn-Ni, Al-Fe, Sn-Mn, and Sn-Co systems, A., 23.
- Russell, E. F. See Downs, F. E.
- Russell, (Sir) B. J., chemical problems in crop production, B., 282.
- Russell, E. W., interaction of clay with water and organic liquids as measured by specific volume changes and its relation to crumb formation in soils, B., 36.
- Russell, F. S. See Harvey, H. W.
- Russell, H. See Murgatroyd, F.
- Russell, H. D. See Eastman Kodak Co.
- Russell, H. N., spectrum and ionisation potential of radium, A., 138. Atmospheres of the planets, A., 322.
- Gaposchkin, C. H. P., and Menzel, D. H., classification of stellar spectra, A., 676.
and King, A. S., are spectrum of europium, A., 137.
- Russell, H. W., principles of heat flow in porous insulators, B., 337.
- Russell, Howard W. See Williams, R. C.
- Russell, J. L., scientific research in soil drainage, B., 36.
- Russell, M. A. See Bancroft, G.
- Russell, N. W. See Ferguson Battery Co.
- Russell, P. F. See Marañon, J.
- Russell, R., and Manns, T. F., value of copper sulphate as plant nutrient, B., 116.
- Russell, R., jun. See Hossenlopp, A. M.
- Russell, R. H., and Gas Fuel Corp., refining of emulsified compounds, (P.), B., 759.
- Russell, R. P. See Standard-I.G. Co., and Standard Oil Development Co.
- Russell, R. S., influence of impurities on properties of lead. III. Influence of silver on the rate of recrystallisation of distorted lead, B., 458.
- Russell, W., drying of sludge, etc., (P.), B., 337.
- Russell, W. C., vitamin-A in eggs, B., 571.
- Taylor, M. W., and Chichester, D. F., relation between antirachitic factor and weight and contents of the gall-bladder of the chicken, A., 417. Colorimetric determination of carotene in plant-tissue, A., 1434. Effect of curing process on carotene and vitamin-A content of lucerne, B., 251.
- Taylor, M. W., and Wilcox, D. E., fate of the antirachitic factor in the chicken. III. Effective levels and distribution of the factor from cod-liver oil and from irradiated ergosterol in tissues of the chicken, A., 261. Comparison of antirachitic potency of cod-liver oil and irradiated ergosterol on a curative and preventive basis, A., 1546.
and Weber, A. L., effect of protein level of the ration on blood-constituents of the hen, A., 388.
- Russell, W. L., characteristics of organic content of rocks, A., 322.
- Russell, W. W., and Latham, D. S., apparatus for photo-electric titration, A., 58.
- Russell-Wells, B. See Haas, P.
- Russer, E. See Pauli, W.
- Russia Cement Co. See Edson, E. R.
- Russia, Lubricating Oil Committee, [refining Grozni mixed-base crude oil], B., 7.
- Rust, G. W., colloidal primary copper ores at Cornwall mines, S. E. Missouri, A., 1344.
- Rusterholz, A. A., anomaly of specific heat of Seignette salt, A., 1454.
- Rustung, E. See Hansen, K.
- Rusu, L. See Michail, D.
- Rusznayk, S., and Hatz, E. B., volumetric determination of haemoglobin, A., 1517.
- Rutgers, A. J., superconductivity, A., 20. Application of thermodynamics to gas equilibria, A., 823.
- Ruth, B. F., filtration. III. Derivation of general filtration equations. IV. Nature of fluid flow through filter septa and its importance in the filtration question, B., 705, 753.
- Ruth, J. P., jun., and Ruth Co., [sulphide] ore separation [by flotation], (P.), B., 680. [Molybdenite] ore separation [by flotation], (P.), B., 857.
- Ruth, W. A., spray residue removal, B., 74.
- Ruth Co. See Ruth, J. P., jun.
- Ruth-Aldo Co., Inc., and Regalia, G. B., apparatus for recovery of carbon disulphide from freshly-spun viscose artificial silk, (P.), B., 301.
See also Mancini, U.
- Rutherford, (Lord), radioactivity: old and new, A., 425. Atomic physics, A., 803.
See also Oliphant, M. L. E.
- Rutherford, F. C. See Ardagh, E. G. R.
- Rutherford, J. J. B. See U.S. Steel Corp.
- Rutherford, J. T. See Standard Oil Co. of California.
- Rutherford, R. C., and Amer. Smelting & Refining Co., refining of metals [lead], (P.), B., 596.
- Ruthner, O., and Zellner, J., chemistry of higher fungi. XXIII. *Geaster fimbriatus*, Fr., and *Polystictus velutinus*, Pers., A., 1432.
- Ruthruff, R. F. See Standard Oil Co. of Indiana, and Sullivan, F. W., jun.
- Rutishauser, E., and Maubetsch, A., calcium and phosphorus content of the skeleton and blood-serum in simple senile osteoporosis, A., 887.
- Rutman, A. P. See Burkser, E. S.
- Rutovski, B. N., and Gluschkova, V. P., ethereal oils from *Perovskia scrophularifolia*, Bge. B., 701.
- Rutter, E. G., fading and other faults of pigments, B., 366.
- Rutz, M. H. See Cartland, G. F.
- Ruyer, A. See Bedos, P.
- Ruyssen, R. See Kruyt, H. R.
- Ružičić, U. S., effect of diet on yield and composition of human milk, A., 511.
- Ružička, A., improvement [drying] of coal material, (P.), B., 485.
See also Páźler, J., and Wegler, R.
- Ružička, L., many-membered carbon rings, A., 203. Artificial preparation of male sexual hormone, A., 346. Constitution of caryophyllene, A., 866. Degradation of sterol derivatives with chromic acid, A., 1120. The male sexual hormone and its artificial preparation in the laboratory, A., 1427. Testicular hormone, A., 1500.
- and Eichenberger, E., polyterpenes and polyterpenoids. XCIV. Degradation of sitostanol acetate by chromic acid, A., 617.
- and Goldberg, M. W., polyterpenes and polyterpenoids. XCV. Dehydrogenation products, $C_{25}H_{42}$, $C_{26}H_{44}$, and $C_{27}H_{46}$, from sterols. XCVII. Identity of the steric configuration of hydroxyl in position 3 in lithocholic acid and epicoprosterol, A., 617, 749.
- Goldberg, M. W., and Meyer, Jules, sexual hormones. IV. Derivatives of synthetic androsterone and one of its isomerides. VI. Androstanediols and their methyl derivatives; specificity of male sexual hormone activity, A., 346, 1125.
- Goldberg, M. W., and Wirz, H., sexual hormones. III. Elucidation of the constitution of androsterone, A., 346.
- Hürbin, M., Goldberg, M. W., and Furter, M., polymembered heterocyclic compounds. VII. Preparation of 7- to 18-membered saturated and unsaturated cyclic imines by reduction of thioisoximes, A., 868.
- and Peyer, E., processes of dehydrogenation. II. Action of selenium or palladised charcoal on cyclopentane derivatives at elevated temperature, A., 738.
- and Roethlisberger, A., isomerides of geraniol and citral, A., 605.
- and Schinz, H., substances with odour of violets. IV. Oil of violet leaves; constitution of aldehyde of violet leaves; Δ^6 -nonadienal. V. Synthesis of aldehyde of violet leaves; Δ^6 -nonadienal or a stereoisomeride thereof. VI. Non-aldehydic components of violet leaf-oil, A., 66, 672.
- and Thomann, G., polyterpenes and polyterpenoids. XCIII. Constitution of β -santalol and β -santalene, A., 625.

- Ruzicka, L., and Waldmann, E., polyterpenes and polyterpenoids. XCVI. Constitution of fichtolite, A., 741.
- and Wettstein, A., sexual hormones. V. Artificial preparation of the male sexual hormone *trans*-dehydroandrosterone and of androstene-3:17-dione, VII. Synthetic preparation of the testicular hormone, testosterone (androstene-17-ol-3-one), A., 1125, 1371.
- Wirz, H., and Meyer, J., polyterpenes and polyterpenoids. XCVIII. Steric inversion of C3 of sterols and male sexual hormones, A., 1125.
- and Zimmermann, W., polyterpenes and polyterpenoids. XCII. Caryophyllenic acid and norcaryophyllenic acid; additive product of maleic anhydride and caryophyllene, A., 351.
- Ruziczka, W., rapid determination of iodine value, A., 876. Regularity of the rapid iodometric analysis of rosin-fatty acid mixtures, B., 1101.
- Ruzin, I. Z., mathematical determination of shrinkage of two-coal mixtures on an analytical basis, B., 1079.
- Ryabinin. See under Rjabinin.
- Ryan, C. F., and Hartford-Empire Co., furnace and regenerator construction therefor, (P.), B., 337.
- Ryan, J. J., and Pyne, G. T., cryoscopy of milk, B., 77.
- Ryan, J. T. S., preservation of perishable foodstuffs, (P.), B., 523. Preservation of beef and mutton, (P.), B., 748.
- Ryberg, B. A., wool [sulphuric acid] carbonisation process, B., 449. [Aluminium chloride] wool-carbonisation process and its effect on the dyeing properties of wool, B., 625.
- Rybo, B., and Aktieb. Filtrum, water-softening apparatus of the base-exchange type, (P.), B., 978.
- Rychlik, W. See Elmer, A. W.
- Rychterówna, A., thermal analysis of the system antipyrine-trichlorobutyl alcohol, A., 703.
- Rydberg, R., formation and dissociation of diatomic molecules, A., 279.
- Ryde, J. W. See Gen. Electric Co.
- Rydin, H., action of crystalline vitamin-B₁ on tissue oxidation of chronic avitaminous pigeon's brain, A., 668.
- See also Peters, R. A.
- Rydon, H. N., constitution of caryophyllene, A., 976. Michael reaction. I. Condensation of ethyl benzylmalonate with ethyl fumarate, A., 977.
- See also Ingold, C. K., Ives, D. J. G., and Linstead, R. P.
- Ryerson, L. H. See Brewer, R. E.
- Rygh, O., non-identity of vitamin-D₂ (irradiated ergosterol, calciferol) and the natural vitamin-D from cod-liver oil, A., 1430. Identity of natural vitamin-D from different species of animals, A., 1430.
- Rylands, G. K. See Rylands Bros., Ltd.
- Rylands Bros., Ltd., and Rylands, G. K., galvanisation or zinc-coating of iron or steel articles, (P.), B., 504.
- Ryllie, A., polarographic studies with the dropping mercury cathode. XLIX. Electro-reduction and determination of bromates and iodates, A., 1079.
- Rymer, T. B. See Richardson, O. W.
- Rymill, F. E., and Corran, R. F., mercurochrome, B., 254.
- Ryschkewitsch, E., refractory oxide ceramic substances, B., 307.
- Ryschkewitsch, E., and Deuts. Gold- & Silber-Scheideanstalt vorm. Roessler, highly refractory products, (P.), B., 546.
- Rysselberghe, P. van, activity coefficients in mixed solutions and the Gibbs-Duhem and Gibbs-Margules formulae, A., 302. Activity and osmotic coefficients of strong and weak electrolytes, A., 702.
- Rytand, D. A. See Cutting, W. C., and Mackay, E. M.
- Ryu, S., blood-lipase and other conditions in tuberculosis, A., 238.
- Ryzhova, A. P. See Efendi, P. G., and Giršavičius, J. O.
- Rzymkowski, J., infra-red photographs of chromium compounds, A., 1216.
- Rzymowska, C. J. See Wenger, P.
- S.
- S.M.A. Corporation. See Barnett, H. M., Cross, R. J., and Holmes, H. N.
- Sá, A., microchemical detection of bismuth, antimony, and gold, A., 838.
- Saal, R. N. J., plastic properties of asphaltic bitumens, B., 791. Surface tension of asphalt bitumens, B., 933.
- Saareinen, P., determination of sulphur in organic substances, A., 1258.
- Saber, A. H., determination of powdered linseed, B., 332.
- Sabetay, S., preparation of ethers of hydroxy-aldehydes by oxidation of α -ethers of glycerol by lead tetra-acetate, A., 1362. Rapid determination of primary and secondary alcohols in essential oils, B., 333. Determination of ethyl phthalate [in essential oils] by the potassium phthalate method, B., 573.
- and Palfray, L., analysis of cumiin essence, B., 1164.
- See Delaby, R., and Palfray, L.
- Sabinin, D., and Minina, H., physiological basis of technique of application of fertilisers, B., 1010.
- Sabinina, L. E., and Polonskaja, L. A., solution of metallic monocystals, A., 1325.
- and Terpnogov, L., surface tension of system sulphuric acid-water, A., 930.
- Sabon, A. B., simple change in flotation cell improves both concentrate and tailing, B., 996.
- Sabouroff, N. V., and Kalebin, M. I., effect of sulphurous acid on apple-pulp pectin, B., 698.
- Sabrou, L., ageing of road tars, B., 535.
- Saccardi, P., highly sensitive reaction of indole and pyrrole, A., 998.
- Sacchi, F. See Bosso, V.
- Sacchi, U., effect of ganglionic sympathectomy on the phosphatase content of bone, A., 1279. Bone-phosphatase and solar irradiation, A., 1280.
- See also Colombi, C.
- Sachanen. See under Sachanov.
- Sachanov, A., cracking [of oils] under pressure, B., 7.
- Sacharov, V. I. See Saslavski, I. I.
- Sachs, A., Levine, V. E., and Fabian, A. A., copper and iron in human blood, A., 509.
- See also Fabian, A. A.
- Sachs, A. P., T.V.P. [oil]-cracking process, B., 7.
- See also Beardsley, E. W., and N. V. Nieuwe Oetroot Maats.
- Saehs, E., detection of protein and glucose in urine, A., 1147.
- Sachs, G. See Göler, F. K. von, and Hermann, L.
- Sachs, K. See Dische, Z.
- Sachs, M. See Hüchel, W.
- Sachsse, G., Kerr effect of chloro-derivatives of methane, ethane, and ethylene, A., 810.
- Sachsse, H. [with Patat, F.], H-atom concentration and mechanism of thermal decomposition of some organic molecules, A., 1206.
- and Bartholomé, E., infra-red spectrum, normal frequencies, and intramolecular forces in selenium and tellurium hexafluorides, A., 680.
- and Bratzler, K., thermal conductivity method for precise determination of heavy isotope of hydrogen, A., 462.
- See also Bartholomé, E., Farkas, L., and Patat, F.
- Sachsse, M. See Scheunert, A.
- Sachtleben, R. See Hönigschmid, O.
- "Sachtleben" Akt.-Ges. für Bergbau & Chemische Industrie, production of molten iron or steel by the direct method, (P.), B., 503.
- Sack, A. M. See Brodski, A. I.
- Sack, H., inner friction of gases in a magnetic field, A., 926.
- Sackett, A. J., mixing machines, (P.), B., 3.
- and Sackett & Sons Co., A. J., mixing machine, (P.), B., 290.
- Sackett, G. A., manganese salts in plantation rubber, B., 418. Consumers' crude-rubber requirements, B., 1104.
- Sackett & Sons, Co., A. J. See Sackett, A. J.
- Sacks, J., and Sacks, W. C., rôle of phosphocreatine in fundamental chemical changes in contracting mammalian muscle, A., 109.
- Sacks, W. C. See Sacks, J.
- Sacrez, R. See Rohmer, P.
- Saddington, A. W. See Boomer, E. H.
- Sadettin, M. See Saenz, A.
- Sadgopal. See Godbole, N. N.
- Sadikov, V. S., Kristallinskaja, R. G., Lindquist-Risakova, E. V., and Menschikova, V. N., effect of temperature on the products of hydrolysis of proteins, A., 638.
- Lindquist-Risakova, E. V., Kristallinskaja, R. G., Menschikova, V. N., Rubel, L. N., Chalezkaja, E. G., and Pessina, A. G., formation of cyclopeptides arising from blood-albumin by hydrolysis in the autoclave, A., 999.
- and Menschikova, V. N., behaviour of animal proteolytic enzymes with plant proteins, A., 252.
- Rozanova, V., and Novoselova, G., hydrolysis of blood-albumin by autoclaving in 2% potassium carbonate solution, A., 230.
- Vadova, V. A., and Kristallinskaja, R. G., hydrolysis of ovalbumin with various mineral acids and alkalis in the autoclave, A., 506.
- Sadler, A. M., and Powell, G., *o*-phenyldiphenyls and "synchronised rotation," A., 211.
- Sadovnikov, L. M. See Bechter, A. A.
- Sadowski, T. See Moraczewski, W. von.
- Sadtler, S. S., and Hepburn, C. L., bituminous road-making composition, (P.), B., 727.
- Sächsisches Serumwerk Akt.-Ges., antithyroidal substance, (P.), B., 524.

- Saechting, H., and Zocher, H., fine structure of wood. I. Volume swelling of pine wood and lignin in different media. II. Vapour-pressure lowering of different liquids on their adsorption by wood and lignin, A., 165, 1316.
- Saeger, C. M., jun., and Ash, E. J., properties of grey cast iron as affected by casting conditions, B., 189.
See also Jackson, Clarence E., and Krynsky, A. I.
- Saegusa, Hachiro. See Hachihama, Y.
- Saegusa, Hikoo, and Kikuchi, K., scattering of fast electrons from thin foil, A., 1061.
- Saeki, H. See Shibuya, K.
- Saeki, Y. See Takahashi, E.
- Sänger, R., dependence of permeability of iron, nickel, and cobalt on frequency, A., 435.
and Fejér, G., frequency-dependence of ferromagnetic permeability as a function of electrical tension, A., 813.
- Sängewald, R. See Weissberger, A.
- Saenz, A., Sadettin, M., and Costil, L., comparative toxicity of sulphuric and acetic acid solutions to *R* and *S* varieties of avian tubercle bacilli, A., 256. Comparative toxicity of sulphuric and acetic acids for *R* and *S* varieties of mammalian tubercle bacilli, A., 256. Differences between mammalian tubercle bacilli, paratubercle bacilli, and *Streptothrix*, revealed by the comparative toxicities of sulphuric and acetic acids, A., 537.
- Särnmark, A. U., manufacture of flakes, etc., from plastic materials containing vegetable matter, especially cereals, (P.), B., 876.
- Säureschutz Ges. m.b.H. See Wirth, J. K.
- Safford, M. M. See Gen. Electric Co.
- Safranez, K., application of the "hydraulic jump" to water purification, B., 384.
- Sagaidatschni, A. F., and Lure, S. N., preparation of concentrated solutions of hydrogen peroxide, B., 849. Preparation of hydrogen peroxide, B., 849.
and Sinani, S. S., distribution of bromine in decomposition products of Solikamsk carnallites, B., 60.
- Vasilenko, M. I., and Skirstimonski, A. O., preparation of sodium perchlorate by electrolysis, B., 1042.
See also Ilijinski, V. P.
- Sagastume, C. A., and Crespi Gherzi, R. A., urinary protein, A., 884.
and Ponce, L. P., biochemical properties of curro-saponin, A., 895.
and Solari, A. A., pigment formation by bacteria, A., 899.
- Sage, B. H., Backus, H. S., and Lacey, W. N., phase equilibria in hydrocarbon systems. VIII. Methane-crystal oil system, B., 710.
- Lacey, W. N., and Schaafsma, J. G., phase equilibria in hydrocarbon systems. V. Pressure-volume-temperature relations and thermal properties of propane. VI. Thermodynamic properties of normal pentane. VII. Physical and thermal properties of a crude oil, A., 22, 290; B., 886.
- Sherborne, J. E., and Lacey, W. N., viscosity of hydrocarbon solutions; solutions of methane and propane in crystal oil, B., 888.
- Sage, E. R., and Improved Devices, Inc., testing of lubricants, (P.), B., 1084.
- Sager, F., isolation of a natural inhibitor from Rumanian cracked distillate and its application to selective acid refining, B., 178.
- Sager, G. F. See Aluminium, Ltd.
- Sager, T. P., permeability of synthetic film-forming materials [on cotton fabric] to hydrogen, B., 303.
- Saggers, L., micrometer gas inlet tap, A., 599.
- Sagortschev, B. See Karaoglanov, Z.
- Sagoschen, J. A., peptisation phenomena in solutions of tanning extracts, B., 563.
- Sagot, R., destruction of earth-nut insects [*Pachymoerus ucaie*], B., 969.
- Sagreras, P. O., and Trepot, L., poisoning by potassium borotartarate, A., 1021.
- Sah, P. P. T., experimental verification of Sah's proposed synthesis of vitamin-C (L-ascorbic acid), A., 66. Synthesis of the carbon skeleton present in sterols, etc., A., 974.
- Chiang, S. H., and Lei, H. H., *p*-bromophenylthiocarbimide as a reagent for identification of aromatic amines, A., 206.
and Fang, H. Y., Chinese citrus fruit. VII. Isolation of essential oils from Fu Chü and Chao Kan, A., 267.
- Kao, Chen Heng, and Chang, T. Y., derivatives of glyoxylic acid and their use in the Hopkins-Cole reaction, A., 65.
and Ma, T. S., azides. II. 3:5-Dinitrobenzazide as a reagent for identification of phenols, A., 207. Chinese citrus fruit. VI. Vitamin-C content of Tsun Chü and Chao Kan, A., 262.
- Ma, T. S., and Chang, H. C., vitamin-C content of Peiping summer fruit and vegetables, A., 262.
See also Kao, Chen Heng, and Lei, H. H.
- Saha, H. See Ray, P. R.
- Saha, N. K., pressure effect of electrical resistance of metals, A., 1453.
See also Kothari, D. S.
- Sahai, P. N. See Chibnall, A. C.
- Sahashi, Y., Takeuchi, K., Shimamoto, T., Iki, T., and Takebe, T., chemistry and pharmacology of campherol and related compounds, A., 89.
- Sahasrabudde, D. L., and Kibe, M. M., chemical changes during formation and germination of the rice grain, A., 548.
- Sahlin, N. A. See Hennesey, J. De L.
- Sahlstein, T. G., metamorphism in the reciprocal salt pair (Na^+ , K^+)-(Cl $^-$, IO $_3^-$), A., 448.
- Sahyun, M., and Beard, P., effect of bacteria on insulin, A., 901.
Simmonds, R., and Working, H., effect of diet on distribution of glycogen in skeletal muscle of the rat, A., 111.
- Saiki, T., and Fujimoto, K., occurrence of calcareous disease. I. Disease caused by fodder containing calcium compounds, A., 382.
- Saillard, E., conductivity control of vacuum-pan [sugar] boiling, B., 201.
and Saunier, R., determination of ash in sugar beet by electrical conductivity measurements, B., 518.
- Saini, H., thermal expansion of rock-salt and pure NaCl, A., 436. Thermodynamics of imbibition and amalgamation, A., 581. Thermal expansion of calcite, A., 1455.
and Mercier, A., X-ray measurements of thermal expansion of sodium nitrate, A., 21.
See also Weigle, J.
- St. Clair Rubber Co. See Strobel, C. J.
- St. George's Engineers, Ltd., and Wilson, F. W., apparatus for removing dust from air, (P.), B., 931.
- St. John, M. W., and Jones & Laughlin Steel Corp., fertiliser, (P.), B., 517.
- St. Joseph Lead Co. See Isbell, W. T., and Weaton, G. F.
- St. Kitts-Nevis Agricultural Department, methods adopted in St. Kitts for fertilising the sugar-cane crop; [composition of soils], B., 868.
- St. Louis Paint & Varnish Production Club, effects of wetting agents on pigment dispersion, B., 32.
- St. Louis University. See Doisy, E. A.
- Saint-Maxen, A., oxidation of quinol solutions. I. Solutions of quinol in pure water and in presence of alkali or alkaline-earth hydroxides. II. Physico-chemical study of alkaline solutions of quinol. III. Effect of alkali salts and metallic hydroxides, A., 587, 706, 1083.
- Saito, G., swelling of cellulose in alkali. IV. Swelling of cross-sections of cotton and of pulp fibre. V. Influence of purification and of mercerisation on swelling of ramie. VI. Influence of alcohol and salt. VII. Change in cross-sectional area of ramie and cuprammonium rayon during dilution and concentration of alkali. VIII. Discussion, B., 267, 303.
See also Kratky, O.
- Saito, N. See Nakashima, T.
- Saito, T., comparative effects of Chilean nitrate and ammonium sulphate [as fertiliser for sugar cane], B., 199.
See also Tadokoro, T.
- Saizev, J. A. See Arbusov, A. E.
- Sajak, E., leather-dressing composition, (P.), B., 1155.
- Sajaniemi, I., p_H of saturated calcium carbonate solutions, A., 585.
- Sakai, T., biological reduction. VI. Oxidation of sugar by striated and cardiac muscle in *B*-avitaminosis; effect of adrenal cortex. VII. Oxidation of lactic acid in *B*-avitaminosis, A., 130.
- Sakakura, Y., incandescence bodies for use as filaments of electric lamps etc., (P.), B., 773.
- Sakamoto, H., increased blood pressure in experimental nephritis, A., 1402.
- Sakato, Y. See Takei, S.
- Sakisaka, S., dehydrogenase activities of the gastro-intestinal mucosa, A., 401.
- Sakisawa, Y. See Nishikawa, S.
- Saklatwalla, B. D., Dunn, H. E., Marshall, A. E., and Southern Mineral Products Corp., titanium phosphate pigment, (P.), B., 511.
Dunn, H. E., and Southern Mineral Products Corp., hydrolysing titaniferous solutions, (P.), B., 849.
- Sakmin, P. K., improvements in the Sabatier-Senderens process for the preparation of paraffins, A., 324. Complete combustion of methane and other hydrocarbons in presence of copper oxide, B., 341. Separation of constituents of coke-oven gas by intensive cooling, B., 534. Determination of olefines and paraffins in coke-oven gas, B., 789.
and Michnovska, J., determination of propylene in ethylene, B., 442.

- Sakostschikov, A. P.**, testing cotton wool for maturity of fibre, and calculating the yield of cellulose on boiling, B., 298. Determination of degree of purity of cotton wool, B., 298.
- Ivanova, V. T., Korsheniovski, G. A., and Kurennova, A. M.**, tannins in cottonseed hulls, B., 469.
- Ivanova, V. T., Kurennova, A. M.**, production of furfuraldehyde from cottonseed hulls, B., 442.
- Leonov, B. I., and Raskina, R. L.**, composition of cotton fibre at various stages of maturity, B., 445.
- Tumarkin, D., and Meshnikova, T.**, celluloses of different viscosities; activated bleaching, B., 57.
- See also **Ardashev, B. I.**
- Saksela, M.**, ores in middle East Bothnia and the Skellefte area, A., 190.
- Sakuma, I., and Momose, I.**, colouring substances of cane sugar. I. II. Anthocyanin and tannin. III. Colouring substances having the nature of humus bodies. IV. Colouring substances from a Formosan molasses. V., B., 603, 870, 920. Bleaching of Japan wax. II., B., 733.
- Momose, I., and Hasegawa, J.**, bleaching of Japan wax. I. B., 560.
- Sakuraba, S.**, effect of papaverine derivatives on the excised intestine, A., 528.
- Sakurada, I.**, specific volume and form and electric charge factors of colloidal particles of cellulose nitrate and acetate, A., 163. Viscosity properties of synthetic highly polymerised substances, A., 163. Simultaneous formation of double and triple complexes in dipole association, A., 927.
- and **Hurukawa, T.**, acetylation of alkali-cellulose with acetic anhydride, B., 299.
- and **Hutino, K.**, penetration of water into the crystal lattice of cellulose, B., 488.
- and **Kitabatake, T.**, cellulose diacetate, A., 201.
- Kitano, T., and Hutino, K.**, colloid chemistry of rice starch and rice boiling. III., B., 697.
- and **Lee, S.**, dielectric investigations on solution, swelling, and thixotropy of cellulose triacetate in chloroform and chloroform-benzene, A., 701. Dielectric investigations of benzene solutions of ethyl- and benzyl-cellulose, A., 1319.
- and **Shojino, M.**, kinetics of acetylation of cellulose fibres. IV. Acetylation of ramie swollen with acetic acid and the X-ray diagram of cellulose triacetate, A., 42.
- and **Tanaka, Kunikichi**, particle form in colloidal rubber solutions, A., 163.
- See also **Hutino, K., Kita, G., Lee, S., and Taniguchi, M.**
- Sakurada, K., and Erbring, H.**, mechanical properties of stretched and unstretched sulphur threads and their changes with time, A., 1218.
- Sakurai, B.**, electrolytic reduction of succinimide, A., 1378.
- Sakurazawa, K., Handa, M., and Hara, R.**, synthesis of sodium cyanamide and sodium cyanide under pressure. I. Sodium cyanamide, A., 179.
- Sala, S. L.**, glutathione and gestation, A., 518.
- Salade, R. F.**, printing half-tones on uncoated paper, B., 943.
- Salani, R.**, pre-defecation [of beet juice], B., 692.
- See also **Canneri, G.**
- Salant, E. O., and Rosenthal, (Miss) J. E.**, vibrational isotope effects in polyatomic molecules. II., A., 10.
- Salaroli, A.**, influence of sulphur mineral water of Tivoli (Aquea Albule) on glutathione content of certain organs, A., 646.
- Salceanu, C., and Gheorghiu, D.**, magnetic susceptibility of organic liquids; applications to the additivity law, A., 289.
- Salcewicz, J.**, equilibrium constant for esterification in the gaseous phase, A., 301. Physico-chemical methods of analysis of esterification mixtures, A., 369.
- See also **Mikulowski-Pomorski, J., and Swientoslawski, W.**
- Saldau, P., and Schamray, F.**, equilibrium diagram of the system magnesium-lithium, A., 1455.
- and **Zamotorin, M. I.**, influence of temperature on the solid solubility of (a) aluminium in magnesium, (b) the compound $MgZn_2$ in aluminium, A., 576.
- Sale, P. D.**, compression tests of structural steel at elevated temperatures, B., 230.
- Salerni, P. M.**, radioactive aqueous bath, (P.), B., 288.
- Salgues, R.**, erythrocytes, haemoglobin, and leucocyte count in cancerous affections of the bird, A., 1391. Biochemical modifications in phytopathology, A., 1436.
- Salit, A.** See **Hiasko, M.**
- Salitowna.** See under **Salit.**
- Salkind, J. S., and Belikova, M. V.**, action of bromine on naphthalene-2-sulphonic acid, A., 612.
- and **Dmitrieva, E. G.**, preparation of triphenyl and tritoyl phosphates, B., 1036.
- and **Filinov, F.**, nitration of 2-bromonaphthalene, A., 204.
- and **Gerchikov, M. G.**, esters of hydrogenated phenols, A., 208.
- and **Pletz, V.**, syntheses by the aid of vinylacetylene, A., 470.
- and **Stetzuro, Z.**, bromo-derivatives of naphthalene, A., 968.
- Zonis, S., and Blochin, N.**, syntheses in the vitamin-A field, A., 983.
- Salle, A. J., and Dunn, R. W.**, carbohydrate nature of pantothenic acid, A., 408. Effect of rice-bran extract on growth of organisms from several genera, A., 1419.
- and **Lazarus, A. S.**, comparison of the resistance of bacteria and embryonic tissue to germicidal substances. I. Merthiolate. II. Metaphen. III. Mercurochrome. IV. Hexylresorcinol, A., 1421.
- Sallet, J.** See **Boudouin, A.**
- Salmag, H., and Kind, J.**, relation between various physical, chemical, and technical properties of clays, B., 674.
- Salmi, E. J.** See **Palomaa, M. H.**
- Salmoiraghi, E.**, enrichment of the chromites of Rhodes, B., 808.
- Salmon, E. S.** See **Goodwin, W., and Martin, Hubert.**
- Salmon, W. D.**, effect of heating caseinogen on [growth] gains in rats, A., 388. Extraction of vitamin-B from a fuller's earth adsorbate, A., 415. Effect of p_H on stability of vitamin-B₂, A., 416.
- Salmon-Legagneur, F.**, reactions of the α -mononitrile of camphoric acid, A., 754.
- Salmoni, R.**, hydrates of dicalcium aluminate, A., 49. Volatility at 20° of heptane-alcohol-benzene mixtures, A., 157. Apparatus for measuring vapour pressure of benzines [and other volatile liquids], B., 49. Hardening of alumina cement, B., 769.
- See also **Crepaz, E.**
- Salmony, A.**, microscopic examination of matt electric-lamp bulbs, B., 591.
- Salo, M.** See **Eastman Kodak Co.**
- Salo, T.** See **Palomaa, M. H.**
- Salomon, Harry.** See **Karrer, P.**
- Salomon, Hugo.** excretion by the colon, A., 380.
- Salomon, K., and Riesser, O.**, influence of digitoxin and strophanthin on oxidation processes of *in-vitro* systems and of surviving heart-muscle, A., 527.
- Salster Laboratories, Inc.**, preparation of therapeutic for deficiency diseases, (P.), B., 46.
- Salstrom, E. J., and Harris, L.**, Raman spectra of fused salts, A., 681.
- Salter, C. S., and Coalson, D.**, artists' charcoal, (P.), B., 1082.
- Salter, R. M.** See **Stringfield, G. H.**
- Salter, T. J.**, metallurgical [three-phase, normal-frequency] induction furnace, (P.), B., 773.
- Salter, W. T., Green, A., and Putman, T. J.**, determining the reducing substance of the anterior pituitary, A., 1145.
- Lerman, J., and Means, J. H.**, calorogenic action of *d*- and *l*-thyroxine, A., 888.
- and **Robb, P. D.**, ammonia production by sarcoma; sparing effect of carbohydrate, A., 514.
- Robb, P. D., and Scharles, F. H.**, liver-glycogen from derivatives of glucose, A., 645.
- See also **Meyer, O. O., and Scharles, F. H.**
- Saltmarsh, (Miss) O. D., and Norrish, R. G. W.**, primary photochemical reactions. VI. Photochemical decomposition of cyclic ketones, A., 713.
- Salvarezza, M.**, clarification of wines with potassium ferrocyanide, B., 41.
- Salvesen, H. A.**, renal rickets, A., 1011.
- Salvia, R.**, crystal structure of arsenical struvite, A., 434.
- See also **Barasoain, J. A., and Palacios, J.**
- Salviati, M.**, digestive enzymes in cattle, A., 533.
- Salzberg, P. L.** See **Du Pont de Nemours & Co., E. I., and Grasselli Chem. Co.**
- Salzer, F.** See **Fischbeck, K.**
- Salzer, H., and Fischer, R.**, toxicity of pyrimidone-veronal mixture, A., 1532.
- See also **Fischer, R.**
- Salzmann, F.** See **Anthes, H.**
- Samaan, K.**, isolation, properties, and pharmacological action of lagarotoxin, A., 1410.
- Samant, K. M.** See **Heilbron, I. M.**
- Samarina, K. I.** See **Volarovitsch, M. P.**
- Samartseva, A. G.**, cathode passivity of silver in silver nitrate solution, A., 1326.
- See also **Chlopin, V. G.**
- Samco Holding Corporation.** See **Baker, H. L.**
- Samec, M.**, colloidal ions of starch, A., 301. [with **Durjawa, A.**], plant colloids. XI. Reaction of starches with proteins, A., 165.
- [with **Modic, R.**], enzymic amylolysis. IV. Action of β -amylase on starch preparations, A., 1415.
- Samec, V.** See **Masner, L.**

- Samesreuther, R., heat-transmitting surfaces in apparatus construction, B., 657.
- Samis, C. S. See Campbell, A. N.
- Samisch, R., location of oxidase in the apricot, A., 795. Measurement of phenolase activity, A., 1278.
- Samisch, Z. See Morgan, A. F.
- Sammartino, R. See Houssay, B. A.
- Sammartino, U., pharmacological action of tannic acid. II. Drugs modifying coagulant action of tannic acid on proteins of ovalbumin, A., 395. Catalase in embryonic development. I. Fertilisation and activity of catalase in eggs of *Salmo irideus*, *Esox lucius*, and *Barbus plebeius*. II. First phase of development of eggs of *Salmo irideus* and *Esox lucius*. III. Catalase activity during growth period of *Salmo irideus* and *Esox lucius* embryos, A., 519, 1415, 1535.
- Samochvalov, K. N. See Held, N. A.
- Samoilov, A. See Ormont, B.
- Samoilovich, P. Y., extraction of montan wax from Ukrainian brown coals of the Alexandriiski district, B., 54.
- Sampson, A. E., applications of fluorescence analysis [to textiles and leather], B., 797.
- Sampson, J., and Hayden, C. E., acid-base balance in cows and ewes during and after pregnancy; milk fever and acetonaemia, A., 1270.
- Sampson, M. M. See Coplan, H. M.
- Sams, E. H., dewatering of sewage sludge and manufacture of manure, (P.), B., 480.
- Samson, J. N., amount of residual arsenic on leafy vegetable crops sprayed and dusted with arsenical insecticides, B., 423.
- Samuel, J. O., and Emlyn Anthracite Colliery, Ltd., indicating and recording the quantity of suspended matter in fluids, (P.), B., 658. Separation from liquids of matter dispersed therein, (P.), B., 1076.
- Samuel, L. W., amino-acid content of wheat-flour dough, A., 1418.
- Samuel, R., theory of valency: development and problems, A., 810. Linking of HCl, A., 917.
- and Uddin, M., theory of co-ordinate linking. VI. Absorption spectra of some complex salts in different solvents, A., 427.
- and Zaki-ud-Din, M., absorption spectrum of CaI, A., 799.
- Zaman, M., and Zubairy, A. W., theory of co-ordinate linking. VII. Absorption spectra of some complex ions, A., 1188.
- See also Asundi, R. K., Hunter, R. F., Karim, M., Lessheim, H., and Rao, C. M. B.
- Samuels, H. See Herbert, R. W.
- Samuelsen, G. S., toxicity and hypoglycaemic effect of guanidine compounds, A., 1020.
- San Martin, R., change undergone by aqueous solutions of crystallised ferrous sulphate, A., 716.
- Sanada, Y., clay of Portland cement. XIX. Preparation of Portland cement from volcanic ash and limestone. XX. Iron oxide of high-alumina Portland cement. XXII.—XXIII. Iron oxide in high-silica Portland cement, B., 307, 357, 497.
- Sanborn, N. H. See Kohman, E. F.
- Sánchez, J. A., colour reaction of digitoxin, gitalin, and gitalin; application to colorimetric determination of these glucosides, A., 69. New colour reaction for quinine, quinidine, and cupreine and its application to determination of quinine, A., 370. Determination of pilocarpine and its salts, A., 877, 1141. Colorimetric micro-determination of morphine in opium and its preparations: tinctures, Sydenham's laudanum, and solutions of morphine hydrochloride, B., 477. Colorimetric micro-determination of morphine in opium and preparations, B., 877.
- Sánchez, J. F. See under Vázquez Sánchez, J.
- Sanchez-Rodriguez. See Colazzo, J. A.
- Sandberg, M., and Perla, D., metabolism of copper and iron in splenectomised rats free from *Bartonella muris* infection, A., 392.
- Sandelin, A. E., feeding of milch cows and quality of dairy products, B., 1162.
- Sandelin, O. See Hägglund, E.
- Sandell, E. B., Kolthoff, I. M., and Lingane, J. J., modified persulphate-arsenite method for [determination of] manganese, with special reference to steel analysis, B., 854.
- Sandell, O. W., and Aktieb. Mo Och Domsjö Wallboard Co., hard [wood fibre] product, (P.), B., 491.
- Sandeman, J., mathematical representation of the energy levels of the secondary spectrum of hydrogen. II. and III., A., 1183.
- Sander, B., classification of deformed shales by optical and X-ray means, A., 61.
- Sander, F., bacterial staining with potassium permanganate; spore staining, A., 257. Fission by bacteria of inorganic complex salts and the use of these salts in differential media, A., 536.
- Šandera, K., factory experiments on filtration kieselguhr for the sugar industry, B., 75. Heat losses in sugar-factory evaporators, B., 328. Analysis and properties of dry basic lead acetate, B., 354. Conductometric determination of ash [in beet sugar], B., 1111.
- and Mirčev, A., m.p. of sucrose, B., 329.
- See also Šanderovala, M., and Šázavsky, V.
- Šanderovala, M., and Šandera, K., determination of the salts (ash substances) in clarified juices and syrups, B., 1111.
- Sanders, A. G. See Lutz, R. E.
- Sanders, G. P. See Frazier, W. C.
- Sanders, H. G. See Garner, F. H.
- Sanders, J. P. See Dobbins, J. T.
- Sanders, M. T., Hales, R. A., and Atlas Powder Co., simultaneous spinning, twisting, and purification of rayon, (P.), B., 96.
- Sanders, P. See Michels, A.
- Sanders, V. H., and Stackpole Carbon Co., electric furnace, (P.), B., 558.
- Sanderson, J. A. See Silverman, S.
- Sanderson, J. M., polybasic acids and their derivatives used in paint products, B., 511. Synthetic resins for printing inks, B., 815.
- Sanderson, R., overcoming troubles with [printing] inks, B., 960.
- Sandford, E. J. See Hanson, D.
- Sandford, F. See Hedvall, J. A.
- Sandhoff, A. See Skinner, C. E.
- Sandholzer, L. A. See Tittler, R. P.
- Sandifer, D. A. N., embrittlement of steels due to soaking at high temperatures, B., 854.
- Sandin, R. B., and Liskear, M., reactivity of halogen in halogenated nitrobenzenes. I. Reaction with piperidine, A., 1113.
- and McKee, R. A., orientation in the benzene ring; preparation of 5-chloro- β -resorcylic acid, A., 976.
- and Margolis, E. T., determination of mercury in iodinated organic mercury compounds, B., 1068.
- See also Overbaugh, S. C., Thornton, H. R., and Woolley, D. W.
- Sando, C. E., Milner, R. T., and Sherman, M. S., pigments of Mendelian colour types in maize; chrysanthemin from purple-husked maize, A., 796.
- See also Markley, K. S.
- Sandomirski, I., and Semenova, B., substitutes for egg yolk in manufacture of margarine, B., 1161.
- Sandonnini, C., and Borghello, V. N., electrolytic dehalogenation of simple organic compounds. I. and II., A., 604.
- Sandor, G., isoionic point of proteins, A., 822.
- and Ninni, C., lipid hapten of aqueous extracts of living tubercle bacilli, A., 1169.
- and Schaefer, W., residual antigens of *B. tuberculosis*, A., 1169.
- Sandovici, (Mlle.) M. See Ionesco-Matiu, A.
- Sands, G. C. See Bird, E. W.
- Sands, J. W. See French, H. J.
- Sands, L., and Nutter, P., hemicelluloses extracted from mesquite wood after chlorination, A., 1042.
- Sandstedt, R. M., collaborative study of manometric determination of gassing power [of wheat flours], B., 1114.
- See also Putnam, H. W.
- Sandström, A., Johann's X-ray spectrometer for high vacuum with concave crystal. II., A., 188.
- Sandulesco, G. See Laboratoires Franç. Chimiothérapie.
- Sandura Co., Inc., decorative sheet material, (P.), B., 1057. Decorative coverings, (P.), B., 1057.
- See also Baldwin, J. T.
- Sandved, K., reversible aquotisation reactions in the cobaltamine group, A., 587.
- Sanenkova, M. F. See Nasakin, S. P.
- Sanero, E., zinc blende deposits at Vallauria (S. Dalmazzo di Tenda), A., 601.
- Sanford, C. R. See Eastman Kodak Co.
- Sanford, F., spectrum of deuterium? A., 135.
- Sanford, R. L. See Ellinger, G. A.
- Sanfourche, A., oxidation of silicon, B., 729.
- Sanilevici, A., heat loss of polonium; calorimetric determination of radioactive constants, A., 558.
- Sanin, P. I. See Nametkin, S. S.
- Sanjana, J. See Bunte, K.
- Sanjo, K., antagonism of drugs in iris epithelium cultures. I. and II., A., 894. Epithelial cells of the iris in cultures in *in vitro*. VII. Influence of arsenious acid, sodium arsenite, sodium arsenate, and arsenic acid on the growth of cultures: histological changes. VIII. Influence of atoxyl, sodium cacodylate, neoarsphenamine, myoarsphenamine, and sodium salviol, A., 1412.

- Sankaran, G., and De, N. K., vitamin-B₁. I. Solubility as present in the international standard preparation. II. Isoelectric point as determined by electrophoresis of solutions made from the international standard preparation, A., 1175.
- Sanna, A., reaction of amides with magnesiumpyrroles, A., 355.
- Sanna, B., chemistry and pharmacology of extracts obtained from different parts of the seed of *Strophanthus kombe*, A., 551.
- Sanner, V. H., absorption spectra in the ultra-soft X-ray region, A., 801.
See also Alfvén, H.
- Sannicé, C., and Truhaut, R., spontaneous precipitation of cholesterol in a [cancerous] plasma, A., 381.
See also Verne, J.
- Sano, K., oxidation equilibrium of magnesium chloride, A., 1323.
- Sansone, R., imitation crimp effects on rayon cloth, B., 670.
- Sanstrom, C. O., welding of structures in chemical industry, B., 554.
- Santalov, F. A. See Kultashev, N. V.
- Santerosse, E. P., sulphur bleaching of woollen materials, B., 846.
- Santen, J. J. M. van, exact measurement of isotherms, A., 951.
- Santesson, C. G., action of lead and zinc sulphides [on animals]; solubility in infusions of organs, A., 399.
- Santiago, M. C., apparatus for filtering liquids or separating solids from liquids, (P.), B., 290.
- Santos, A. C. See Oliveros, L. B.
- Santos, J. A., X-ray study of the caesium salts of certain 12-heteropoly acids, A., 920.
See also Illingworth, J. W.
- Santos Ruiz, A. See Thorbjarnarson, T.
- Sanyal, S., determination of fibre per cent. cane by an indirect method, B., 1062.
- Sapegno, E., behaviour of carbohydrate reserve at high altitudes, A., 529.
See also Madon, V. F., and Rossi, Alessandro.
- Sapeika, N. See Gunn, J. W. C.
- Saphier, J., ester gum colour; its vital dependence on packaging, B., 319.
- Saphir, W., function of the pineal body, A., 542.
- Sapiro, R. H. See Bone, W. A.
- Saporoshez, A. V. See Volkova, Z. V.
- Saposhnikov, L. M., and Bazilevich, L. P., plastometric investigation of the coking process, B., 437.
- Saposhnikova, N. V., and Petscherkina, Z. A., effect of neutral salts on rate of hydrolysis of ethyl acetate in presence of strong acids, and the theory of Brønsted, A., 1328.
- Sapre, L. G. See Dasannacharya, B.
- Sarabia, A. See Guzmán, J.
- Sarata, U., biochemistry of copper. VI. Copper in relation to menstruation and pregnancy; copper in men's blood. VII. Blood-copper in anaemia in men and horses; blood-copper in children. VIII. Effect of gradual loss of blood on blood-copper; copper content of bone-marrow. X. Effect of fasting and diet on blood-copper, A., 643.
- Sarazin. See Vincent, V.
- Sardik, Inc., and Cowgill, W. W., treatment of food materials, (P.), B., 205.
See also Cowgill, W. W.
- Sardofontana, V. di S., determination of rational composition of Portland cement, B., 675.
- Sarevitsch, T. S. See Nesmejanov, A. N.
- Sargent, J. D., spreadability of butter. II. Measurement of "body" in butter by physical determination, B., 475.
- Sargent, N. A., treatment of waste sulphuric acid [from petroleum refining] and manufacture of sulphates and of absorptive carbon therefrom, (P.), B., 305. Hydrolysis of alkyl sulphate esters for production of alcohols and ethers, (P.), B., 619.
- Saric, R. See Genevois, L.
- Sarkar, P. B., jute lignin. V. Chlorination of lignin. VI. Isolated lignin and lignin native in jute. VII. Behaviour of organic compounds towards ClO₂ and its significance for the constitution of lignin. VIII. Methylation of lignin. IX. Acetylation of lignin, A., 214, 978, 1374, 1502. Free phenolic group in lignin; evidence from action of chlorine dioxide on aromatic and aliphatic compounds, A., 621. Tensile strength of jute fibre, B., 488.
See also Goswami, H. C.
- Sarkis, G. See Cornubert, R.
- Sarmento, A. de M., and Da Costa, M. J. B., calcium, potassium, ultrafilterable calcium content, and the ratio of calcium to potassium in the blood in pulmonary tuberculosis, A., 238.
- Sarnowicz, W. See Ninni, C.
- Sarquis, M. N. See Randall, M.
- Sarra, M., surface phenomena on the surface of molten cast iron, B., 309.
- Sarre, H., arteriaisation of blood. IV. Balance of oxygen tension between alveoli and blood and the diffusion constant, A., 878.
See also Kramer, K.
- Sartain, P. J. See Braun, G.
- Sartorius, F., and Jötten, K. W., silicate analysis in industrial dusts, B., 526.
- Sartory, A., Sartory, R., Meyer, Jacques, and Arnold, Frédéric, cultural factors necessary to determine fertility of soil by means of *Aspergillus niger*, Cramer, A., 786. Relation between phosphorus content of soil and yield of mycelium of *Aspergillus niger*, A., 898.
- Sartory, R. See Sartory, A.
- Saruya, K. See Miyama, Y.
- Sarver, L. A., and Fischer, W. von, oxidation-reduction indicators. I. Diphenylbenzidinesulphonic acid, A., 1092.
and Johnson, J. H., preparation of diphenylbenzidine and its use as an oxidation-reduction indicator, A., 462.
- Sarzana, G., and Gatto, A., nitrogen metabolism. Series 2. I. Nutritive value of ammonium salts, A., 113.
See also Lombroso, U., and Spoto, P.
- Sas, F. E. R., sodium nitroprusside and [determination of] acetone in urine, A., 513.
- Sasada, S. See Nakae, D.
- Sasaki, N., and Nakao, T., dependence of probability of the ionisation $H_2 \rightarrow H+H^++e$ kinetic energy, on orientation of the molecules with respect to the colliding electrons, A., 912. Molecular orientation and probability of dissociation of molecules by electron impact, A., 1185.
- Sasaki, S., mono-amino-acids of soya-bean protein, A., 1181.
- Saslavski, A. J., Ettinger, J. L., and Eserova, E. A., mutual solubility of aluminium, sodium, potassium, and iron nitrates in water in presence of nitric acid. I., A., 928.
See also Osokoreva, N. A.
- Saslavski, I. I., chemical structure of the earth, A., 841. Composition and contraction of the earth, A., 1099.
and Sacharov, V. I., regularities in the volume changes of solutions on neutralisation, A., 579.
- Sasso, E., [non-jexistence of free choline in the blood, A., 508.
- Sastri, B. N., and Row, G. R., banana amylase, A., 532.
and Sreenivasaya, M., securing rigidity of electrodes in conductometric work, A., 723.
See also Dastur, N. N.
- Sasyk, Z. See Plazek, E.
- Sata, N., significance of gas phases in the mechanical synthesis of disperse mercury systems (agitation synthesis and ultrasonic-wave synthesis), A., 700.
and Kimura, O., colloidal systems of three components. I. Colloidal behaviour of the critical mixture of three fluids, A., 1459.
and Watanabe, Seiichi, relation between adsorption, solubility, and nature of the solvent. IV., A., 442. Influence of ultrasonic waves on the colloid solubility of metal hydroxides. I., A., 1320.
- Satava, J., determination of malt extract by washing out spent grain, B., 120.
- Satke, O., and Thums, K., salvarsan and galactose assimilation, A., 781.
- Sato, A. See Matsudaira, M.
- Sato, Masanori, Inaba, Takuya, and Kitagawa, K., alcohol extraction of fatty oils. I. Mutual solubilities of some vegetable oils. II. Extraction of peanut oil. III. Extraction of cottonseed oil, B., 318, 559.
and Wada, N., cleavage of lecithin by heat, A., 63.
See also Inaba, Takuya.
- Sato, Masayoshi, and Murata, Kiichi, colorimetric micro-determination of magnesium in milk, A., 1399.
- Satō, Mizuho, mean free path of metal electrons, A., 1047. Possible determination of state of degeneracy of a gas, A., 1076.
- Satō, Tomoo, equilibrium diagrams of salts for salt baths. II. System Na₂CO₃-NaCl-KCl. III. System Na₂CO₃-BaCl₂-KCl, A., 36, 303. Decreasing porosity of melting-tubes made of alumina, B., 804.
and Sunami, J., equilibrium diagrams of salts for salt baths. I. System Na₂B₄O₇-NaCl-KCl, A., 36.
- Sato, Torawo. See Nagaoka, Z.
- Sato, Yasutaro. See Miyazaki, H.
- Satō, Yoshio. See Ishikawa, F.
- Satoh, S., heat of formation and specific heat of aluminium nitride, A., 1324. Phosphorescent beryllium nitride, A., 1446.
- Satoh, T., hydrolysis of adenosinetriphosphoric acid by phosphomonoesterase and pyrophosphatase, A., 403.
- Sattar, A., fungi associated with blight diseases of certain cultivated leguminous plants, A., 269.

- Sattler, L., Altamura, M., and Prener, S., higher β -alkyl ethers of α -dibromopropane [$\beta\beta'$ -dibromoisopropyl ethers], A., 471.
- See also Zerban, F. W.
- Sauer, E., and Burck, W., determination of the velocity of solution of soaps, A., 587.
- and Steiner, Dora, mode of formation and composition of colloidal and precipitated copper sulphides, A., 1073.
- Chemical reactions between colloids. I. Copper and sulphur. II. Mercury and sulphur, A., 1074, 1320. Preparation of mercury sols by reduction, A., 1318.
- Sauer, J. J., Jett-Jackson, C. E., and Reynolds, S. R. M., reactivity of the uterus to pre-sacral nerve stimulation and to adrenaline, pituitrin, and pilocarpine administered during certain sexual states in the anaesthetised rabbit, A., 1425.
- Sauerbrei, E., and Scheruhn, W., sp. gr. and gas yield of technical calcium carbide, B., 613. Rapid determination of acetylene in generator water, B., 756.
- Sauerlandt, W., stall manure, B., 73.
- Sauerwald, F. [with Gering, K.], measurement of viscosity of alkali metals *in vacuo*, A., 290.
- and Gross, H., practical distinction between hardening [of steel] due to martensite and [that due to] separation [of other constituents], B., 230.
- Schmidt, B., and Pelka, F., surface tension of molten metals and alloys. V. Surface tension of Fe-C alloys, Hg₂Tl₂, and NaHg, its variation with time in the case of thallium, and surface tension of slags, A., 811.
- See also Gering, K., and Rademacher, A.
- Saul, E. L., and Nelson, J. M., influence of proteins on activity of yeast-invertase, A., 1415.
- Saunders, A. R., phanerogamic parasiticism, with particular reference to *Striga lutea*, Lour, B., 248.
- Saunders, B. See Gamble, D. J. C.
- Saunders, B. C., glutathione; its reaction with alkali and some N- and S-derivatives, A., 202.
- Saunders, D. H. See Williams, R. J.
- Saunders, F. J. See Cole, H. H.
- Saunders, J. A., guanidine and parathyroid glands, A., 1010.
- Saunders, J. M. See Minot, A. S.
- Saunders, K. H. See Imperial Chem. Industries.
- Saunders, S. L. M., [phenol-aldehyde] synthetic resin composition, (P.), B., 861. Manufacture of [alkyd] synthetic resins and synthetic resin varnishes, (P.), B., 861. [Alkyd] synthetic resin compositions, (P.), B., 861. Synthetic resin composition, (P.), B., 1057.
- Saunier, (Mlle.) D. See Lemarchands, M.
- Saunier, R. See Sailard, E.
- Saupe, E., X-ray spectrographic structure investigations on biological objects and human tissues, A., 231.
- Saurin, C. J. See Wilkinson & Son, Ltd., J.
- Sauter, E. R. See Allen, J., jun.
- Sauveur, A., ageing of metals and alloys, B., 153.
- and Anthony, H. L., malleable castings, B., 904.
- Savage, R. M., absorbency of cotton wool, B., 57.
- Savard, J., ionisation potentials and energies of formation of halogen molecules, A., 12. Role of the electron in chemical combination, A., 150. Raman spectra of methyl-diethyl-carbinol, benzyl-dimethyl-carbinol, and the corresponding ethylenic hydrocarbons, A., 681.
- See also De Hemptinne, M.
- Savare, J., vitamins of olive oil, B., 416.
- Savchenko, V. See Komlev, L. V.
- Savel, P., artificial disintegration of elements, A., 1049.
- Savelsberg, W., electrolytic preparation and refining of nickel, B., 413.
- and Fischer, August, assay and analysis of metals of the platinum group, A., 1096.
- Saviano, M., water exchange. VI. Water and ash in bodies of animals subjected to diets poor and rich in water. VII. Effect of acids and alkalis on diuresis, when administered orally in starvation. VIII. Importance of acidogenic or alkaligenic character of the diet on hydration of the tissues. IX. Variations in diuresis and urinary pH in animals on acidogenic and alkalogenic diets, A., 525, 652, 1524. Follicular hormone and coagulation of blood, A., 1519. Micro-determination of calcium in small quantities of biological liquids, A., 1552.
- Savin, A. K., activator of lactic acid fermentation, A., 255.
- Savinaev, A. M. See Lopatto, E. K.
- Savino, E. See Videla, C. A.
- Savinova, V. K. See Ivanov, K. I.
- Savitski, A. J. See Berkman, Y. P.
- Savostianova, M. V. See Arzibischev, S. A.
- Savron, E. See Normark, P., and Palladin, A. V.
- Savtschenko, G. S. See Tananaev, I.
- Savtschuk, M. N., application of shale ash in the manufacture of building material, B., 1028.
- Savvateev, A. L., corrosion tests on a galvanised iron, B., 1046.
- Sawai, I., surface potentials of aqueous solutions of octyl alcohol and octoic acid, A., 698.
- Sawatari, M., dispersion of mullite, A., 1346.
- Sawczycka, S. See Sládek, J.
- Sawicki, J. See Krause, A.
- Sawman, S., dyeing of discarded jute bagging, B., 988.
- Sawyer, J. H., jun., secondary and tertiary particles produced by cosmic rays, A., 679.
- Sawyer, M. E. McK., and Brown, M. G., effect of thyroidectomy and thyroxine on the response of the denervated heart to injected and secreted adrenaline, A., 900.
- Sawyer, R. A. See Bacher, R. F., Benson, A. N., and Earls, L. T.
- Sawyer, S. D. See Blatherwick, N. R.
- Sawyer, W. W., electrolytic separation of diplogen, A., 456.
- Saxholm, K. See Dietzel, R.
- Saxl, I. J., determination of crépage in yarns and fabrics, B., 1038.
- Saxton, J. See Loeb, L.
- Saxton, R., alloy-steel wire, B., 310. Cold-work action on stainless steel, B., 1047.
- Sayers, R. R., Dalla Valle, J. M., and Yant, W. P., industrial hygiene and sanitation surveys in chemical establishments, B., 527.
- Sayles, H. S. See Imperial Chem. Industries.
- Saylor, C. P., thin cell for use in determining the refractive indices of crystal grains, A., 1217. Microscopical methods for determining refractive index by immersion, A., 1475.
- Saylor, W. J. See De Vore, L. T.
- Sayre, F. M. See Curry, H. W.
- Sayre, J. D. See Morris, V. H.
- Saylor, C. P. See Smith, W. H.
- Sazama, R. F., codling-moth studies (1933) at the Vincennes, Indiana, laboratory, B., 1014.
- Sázavský, V., and Šandera, K., control of the working of the evaporating plant [of sugar factories], B., 328.
- Scacciati, G., determination of cobalt and nickel in zinc ores and electrolytic zinc, B., 1146.
- Scalfidi, V., and Giliberti, P., suppression of renal function. VI. Water content of skin and blood. VIII. Blood-urea and ammonia. X. Creatine and creatinine in blood, A., 518, 1261.
- and Moracci, E., suppression of renal function. VII. Changes in mineral constituents of blood (sodium, potassium, chlorine, phosphorus, magnesium, calcium), A., 518.
- Seafle, F., Stromboli magnetites and determination of Ti₂O₃ therein, A., 468. Behaviour of ferric chlorosulphate, A., 1335.
- Seagliarini, G., and Cesari, G. C., additive compounds of halides of bivalent metals with organic bases. VIII, A., 49.
- and Ragno, M., influence of temperature on formation of additive compounds, A., 182.
- Sealabrino, R. See Breusch, F.
- Scalzi, A. See Azzarello, E.
- Scanlan, G. A., and Holzwarth, C., X-ray film, (P.), B., 750.
- Scanlan, J. T., magenta series. I. Preparation and spectrography of the lower basic members, A., 973.
- and Reid, J. D., benzoylauramine G; new indicator for Kjeldahl nitrogen determinations, A., 639.
- Scărlătescu, N. See Nenitzescu, C. D.
- Scarrow, J. A., industrial importance of m.p., and apparatus for their determination, A., 839.
- Scarseth, G. D., fixation of phosphates by soil colloids, B., 421. Mechanism of phosphate retention by natural aluminosilicate colloids, B., 1107.
- Scatchard, G., and Hamer, W. J., application of equations for chemical potentials to partially miscible solutions, A., 1461. Application of equations for chemical potentials to equilibria between solid solution and liquid solution, A., 1461.
- and Prentiss, S. S., f.p. of aqueous solutions. VIII. Mixtures of sodium chloride with glycine and ethyl alcohol. IX. Mixtures of the reciprocal salt pair potassium nitrate-lithium chloride, A., 30.
- Schaack, E., determination of flame velocity of combustible gas mixtures, B., 258.
- Schaad, J. A. See Clark, G. L.
- Schaad, R. E. See Ipatiev, V. N., and Universal Oil Products Co.
- Schaaf, F., tyrosine-tyrosinase reaction in presence of L-ascorbic acid, A., 1537.
- See also Jadassohn, W.

- Schaaff, E.**, effect of gases on photo-electric effect of platinum, A., 12.
- Schaafsma, J. G.** See **Sage, B. H.**
- Schaal, G.** See **Solotareva, N. P.**
- Schaal, O.**, Scholler (Tornesch) procedure for saccharification of cellulosic substances, B., 329.
- Schabanov, J. M.**, carbohydrates of tobacco, A., 1550.
- Schabarov, V. V.** See **Orlov, N. A.**
- Schachenmeier, R.**, electronic theory of superconduction, A., 154. Superconductivity, A., 814.
- Schachkeldjan, A. B.**, corrosion of the positive grids of the Foré type of acid accumulator plates, under conditions of formation, B., 811.
- Schachnazarova, E. M.** See **Borisov, P. P.**
- Schachova, M. A.** See **Tananaev, N. A.**
- Schachowskoy, T.** See **Elöd, E.**
- Schaetelkäsefabrik F. Zwick**, preservation of rindless cheese, (P.), B., 1067.
- Schack, M.** See **King, C. V.**
- Schackmann, H.** See **Benrath, A.**, **Krings, W.**, and **Schröder, W.**
- Schade, H.**, and **Pein, H. von**, accurate, adjustable gas-mixing apparatus for p_H measurements of biological liquids, A., 270.
- See also **Grünberg, T.**
- Schade, H. A.**, influence of vitamin-C on pigmentation, A., 1176.
- Schade, W.**, electrical behaviour of rectifying layer of lead sulphide, A., 1055.
- See also **Kruber, O.**
- Schadendorff, E.**, and **Verdino, A.**, condensation of cholesteryl chloroformate with alcohols and phenols, A., 745.
- See also **Verdino, A.**
- Schächer, F.** See **Weygand, C.**
- Schaede, R.**, proteolytic enzymes in plants, A., 122.
- Schaefer, A. E.** See **French, H. E.**
- Schaefer, C.**, and **Bergmann, L.**, determination of elastic constants of crystals, A., 1475.
- Schäfer, F.**, electrolytic removal of fat, B., 773.
- Schäfer, G.** See **Kuhn, A.**
- Schaefer, G. M. P.** See **Erhard, G. T.**
- Schäfer, J.**, use of bituminous material for waterproofing against underground water, with particular reference to the construction of Berlin subways, B., 1054.
- Schaefer, W.**, effect of repeated injections of phenol on antibodies of normal rabbit serum, A., 1263.
- and **Zoboli, C.**, neutralising power of anti-tuberculosis sera with respect to tuberculin, A., 126.
- See also **Chargaff, E.**, and **Sandor, G.**
- Schaefer, W. J.** See **Klooster, H. S. van.**
- Schaeffer, G.** See **Le Breton, E.**
- Schaeffer, J.**, regenerative coke oven with vertical heating flues, (P.), B., 536.
- Schäffner, A.**, and **Bauer, Erwin**, relation between phosphorylation and oxidation-reduction in fermentation and glycolysis, A., 250. Enzymic determination of α -glycerophosphate in admixture with β -glycerophosphate, A., 660. Fermentative enzymes. I. Yeast-phosphatase, A., 661.
- Bauer, Erwin**, and **Berl, H.**, fermentation enzymes. II. Yeast-phosphatase. III. First phases of phosphorylation in alcoholic fermentation, A., 784, 1026.
- Schafer, E. R.**, and **Pew, J. C.**, improved pulpwood grinder for experimental work, B., 764. Effect of temperature and consistency in mechanical pulping, B., 1087.
- See also **Curran, C. E.**
- Schaff, C. W.** See **Mathers, F. C.**
- Schaffer, J. M.**, and **Tilley, F. W.**, parasiticide, (P.), B., 79.
- Schafer, N. K.**, and **Lee, M.**, effect of anterior pituitary growth hormone on protein metabolism, A., 541.
- Schaffernicht, W.**, transformation of light images into electron images, A., 557.
- Schaffner, (Miss) M.** See **Reimer, (Miss) M.**
- Schafmeister, P.**, foreign raw materials in special steels for [German] chemical plant, B., 1047.
- and **Naumann, F. K.**, use of corrosion-resistant steels in the chemical, especially the nitrogen, industry, B., 458.
- and **Tofaute, W.**, corrosion-resistance of metallic constructional materials, particularly stainless steel, to cooling solutions, B., 807.
- See also **Fry, A.**
- Schafraan, I. G.** See **Roiter, V. A.**
- Schafraanik, J.** See **Abel, E.**
- Schagalov, A. J.** See **Semenov, V. M.**
- Schairer, J. F.** See **Bowen, N. L.**
- Schakina, A. A.** See **Joffe, J. A.**
- Schakirov, A.** See **Kurtschatov, I. V.**
- Schalch, J.**, and **Van Schaack Bros. Chem. Works, Inc.**, reacting olefines with carbon monoxide, (P.), B., 761.
- Schales, O.**, β -substituted ethylamines. I. Preparation of β -phenylethylamines from ω -nitrostyrenes. II. Catalytic hydrogenation of oximes, A., 1232, 1491.
- See also **Hahn, G.**
- Schall, A.** See **Brintzinger, H.**
- Schallamach, A.** See **Suhrmann, R.**
- Schamberg, J. F.**, **Kolmer, J. A.**, and **Brown, Herman**, arsenoxide in relation to toxicity and therapeutic activity of arspenamine and neoarsphenamine, A., 531.
- Schames, L.**, field between an α -particle and an atomic nucleus, A., 1443. Fundamental difference between material mass and electromagnetic mass, A., 1443.
- Schamray, F.** See **Saldau, P.**
- Schantz, J. M.**, wood rosin as raw material for protective coatings, B., 815.
- Schanz, H.**, opening stoppered bottles, A., 723. Liebig condenser [modification], A., 952.
- Schaper, E.** See **Kofler, L.**
- Schapiro, E.**, and **Proferansowa, M. N.**, determination of maltose in presence of sucrose and monoses, A., 609.
- Schapiro, M.** See **Podolskaja, M.**
- Schapiro, S. L.** See **Tauson, V. O.**
- Schaposchnikov, S. I.**, radiotechnic method of studying fatigue of metals, B., 65.
- Schapovalenko, A. M.** See **Tananaev, N. A.**
- Schapovalov, M. A.**, operation of a blast furnace on an oxygen-enriched blast, B., 904.
- Schapschinskaja, O.** See **Arbusov, B. A.**
- Schar, R.** See **Tseng, A. T. K.**
- Scharaschenidze, S. S.** See **Urazovski, S. S.**
- Scharf, R.**, pure cuprous oxide for deducing the law of multiple proportions, A., 714.
- Scharff, G.**, validity of Becker's relation for initial permeability of highly strained nickel wires, A., 1452.
- Schargorodski, S. D.** See **Fialkov, J. A.**
- Scharkov.** See under **Sharkov.**
- Scharles, F. H.**, **Baker, M. D.**, and **Salter, W. T.**, peculiarity in carbohydrate metabolism of cancer, A., 514. Enzyme systems of sarcoma and muscle dealing with hexose phosphates, A., 1279.
- Robb, P. D.**, and **Salter, W. T.**, liver-amylase: effect of nutrition and of hormones, A., 1162.
- See also **Salter, W. T.**
- Scharoiko, P. M.** See **Archarov, V. I.**
- Scharopova, A. V.**, and **Proschtschin, I. V.**, determination of m -xylene in technical mixtures, B., 938.
- Scharpenak, A. E.**, amino-acid composition of important food proteins. I. Theoretical, A., 1014.
- Balaschova, O. N.**, and **Solovieva, E. M.**, amino-acid composition of important food proteins. IV. Hen's eggs. V. Optimum amino-acid composition of dietary protein, A., 652.
- See also **Balaschova, O. N.**
- Scharrer, K.**, iodine content of south German soils, B., 917.
- and **Gottschall, R.**, determination of small quantities of boric acid [in soils and fertilisers], B., 820.
- and **Schorstein, H.**, determination of potassium in mixed fertilisers, B., 866.
- and **Schropp, W.**, action of vanadium on cultivated plants, A., 553. Effect of chromium and chromate ions on cultivated plants, A., 553. Water and sand cultures [of plants] with manganese, B., 73. Water- and pot-culture trials of the action [on plants] of various potassium salts, with special reference to magnesium, B., 116. Effect of boron in fertilisers, B., 244. Influence of nutrient supplies on plant growth in highly acid soils, B., 867. Effect of various absorbents on growth of plants, B., 918.
- Scharrnbeck, W.**, nitrocellulose from wood pulp, B., 126.
- Scharschu, C. A.**, and **Allegheny Steel Co.**, applying inorganic insulation to electrical [steel] sheets, (P.), B., 315.
- See also **Kiefer, G. C.**
- Schartner, H.** See **Emde, H.**
- Schattenstein, A. I.**, catalytic action of ammonium salts and ammono-acids on ammonolysis of santonin in liquid ammonia solution, A., 174.
- See also **Monoszon, A. M.**
- Schaus, A.**, and **Dorr Co.**, countercurrent leaching process, (P.), B., 51.
- Schavrigin, A. I.** See **Netetkin, S. S.**
- Schay, G.** See **Berger, I.**, and **Roth, Erzsébet.**
- Schdanov.** See under **Shdanov.**
- Scheberstov, V. J.**, sensitometric studies of developers and development, B., 1166.
- Schechter, A.** See **Roginski, S.**
- Scheel, use of charcoal as a manure, B., 165.**
- Scheele, E.**, caffeine-free coffee, (P.), B., 205.
- Scheele, W.**, **Schulze, W.**, and **Spandau, H.**, humic acids. I. and II., A., 1320.
- Scheepers, L.** See **Goldfinger, P.**
- Scheer, J. van der.** See **Landsteiner, K.**

- Scheffer, F.**, determination of nutrient content [of soils] in field and Mitscherlich pot-culture experiments, B., 421. Manuring of soils in dry climates, B., 515. Manuring of newly cultivated soils, B., 515.
- and **Karapurkar, Y. M.**, dependence of nitrification [in soil] on nature and rate of decomposition of organic materials, B., 866.
- Scheffer, F. E. C.** See **Meyer, Gerrik.**
- Scheffer, L.**, iodine metabolism in hyperthyrosis, A., 1009.
- Scheffer, H. H.**, and **Scheffer, O.**, treatment [sizing] of textile fibres, (P.), B., 186.
- Scheffer, O.** See **Scheffer, H. H.**
- Scheib, W.**, and **Hedfeld, K.**, rotation-vibration band of hydrogen cyanide near 10,381 Å., A., 10, 428.
- Scheibe, A.**, value of oat seed as determined by morphological and chemical analysis, B., 689.
- Scheibe, G.**, and **Schöntag, A.**, errors in quantitative spectrographic analysis of the iron-silicon system, B., 854.
- Scheiber, H., jun.**, paint analysis, B., 814.
- Scheiber, H. E.** See **Helferich, B.**
- Scheiderer, G.** See **Fleischhacker, H.**
- Scheidt, A. W.**, and **Electric Smelting & Aluminium Co.**, shaping and cooling hot liquid [saline] detergent, (P.), B., 187.
- Scheidt, P.** See **Dilthey, W.**
- Scheil, E.**, induction period of the austenite transformation, A., 1066. Transformations in irreversible iron-manganese alloys, A., 1314. Irreversibility of iron-nickel alloys and their equilibrium diagram, A., 1456. Formation of fissures in steel during heat treatment, B., 359. Occurrence of a high crystallising force in the formation of iron-zinc alloys, B., 677.
- and **Tonn, W.**, comparison of the Brinell and scratch hardnesses [of steels], B., 230.
- Schein, H.**, and **Riesser, O.**, dependence of narcotic action in muscle on concentration of calcium and significance of calcium for irritability of motor nerve-endings, A., 525.
- Scheinberger, E.** See **Feix, R.**, and **Plawenn, A. von.**
- Scheiner, H.** See **Broun, D.**
- Scheinfinkel, N.**, dependence of glucose consumption of the surviving frog's heart on the output and accompanying factors of the work performance, A., 654.
- Scheinker, N. S.**, study of degree of dispersion of dyes by the diffusion method, A., 1072. Adsorption of dyes of varying degrees of dispersion, A., 1072. Study of solvation and measurement of thickness of the solvate sheath, A., 1201.
- Neumann, R. E.**, and **Schirov, G. A.**, investigation of solvation and aggregation, A., 1074.
- Scheinman, R. D.** See **Schkurenko, P. P.**
- Schell, C.** See **Guillemet, R.**
- Scheloumova, A.**, and **Menkina, R.**, higher plants as a source of carbonaceous nutrition for *Azotobacter*, B., 1109.
- Scheludko, M.** See **Finkelstein, V. S.**
- Scheludko, M. K.**, catalytic preparation of hydrochloric acid from chlorine and water, B., 722.
- See also **Brodski, A. I.**, and **Skidelski, A. J.**
- Schemjakin, F. M.**, gravimetric determination of vanadium with ammonium benzoate, and of titanium with tannin, A., 319. Colorimetric determination of cerium and titanium by means of gallic acid, A., 464. Natural classification of chemical compounds. IV., A., 569. Morphology of chemical reactions in gels. VIII. Effect of acids and alkalis on Liesegang rings and the "radial rosette," A., 1321.
- and **Tschapigin, V. F.**, gravimetric determination of vanadium by means of ammonium benzoate, A., 1095.
- See also **Michalev, P. F.**
- Schemjakin, M. M.** See **Eichman, R. K.**
- Schenck, E. G.** See **Wollschitt, H.**
- Schenck, F.**, esterification of the four isomeric 3-benzoyl-2-phenylcyclopropane-1-carboxylic acids in methyl, ethyl, and isopropyl alcohol in presence of hydrochloric acid, A., 41. Addition of methyl alcohol to methyl *o*-nitrostyrylcarbamate with formation of methyl α (?)-methoxy- β -*o*-nitrophenylethylcarbamate, A., 206. Preparation of β -benzylidene- α -*o*-nitrobenzylidene- and α -benzylidene- β -*o*-nitrobenzylidene-propionic acid, A., 211. Nitration of lactones Ia and IIb [lactones of the isomeric 2-phenyl-3- α -hydroxybenzylcyclopropane-1-carboxylic acids], A., 858.
- See also **Windaus, A.**
- Schenck, H.** See **Bennett, H.**
- Schenck, M.**, bile acids. XLIV. XLV. XLVI. Behaviour of the nitroso-compound $C_{14}H_{23}O_5N$ (isobilanic acid series) and of the dioxime of 7:12-diketocholelic acid towards nitric acid, A., 213, 620, 1236.
- Schenjan, F. F.** See **Juriev, J. K.**
- Schenk, G.**, and **Dean, G. A.**, hydrocyanic gas penetration in 140-pound bags of flour under atmospheric conditions, B., 121.
- Schenk, M.** See **Bernoulli, A. L.**
- Schenk, P. W.**, sulphur monoxide. IV. Oxidation of sulphur, A., 51.
- and **Platz, H.**, sulphur monoxide. V. Reaction and mol. wt. of sulphur monoxide, A., 593.
- Schepens, C.** See **Handovsky, H.**
- Schepilevskaja, N.**, sources of vitamins. III. Green onions as source of vitamin-C. VII. Pine needles as sources of vitamin-C, B., 171.
- Schepmoes, C.** See **Cook, G.**
- Scheps, M.** See **Elmer, A. W.**
- Scherbaum, B.**, grinding mill, (P.), B., 531.
- Schere, S.** See **Pellarano, J. C.**
- Scherer, M.**, and **Piekara, A.**, superposition of electric and magnetic birefringence, A., 149.
- See also **Piekara, A.**
- Scherer, R.**, properties of high-speed steels produced in coreless induction and in arc furnaces, B., 457.
- and **Geipel, H.**, creep tests [on steels], B., 1047.
- Scherer, T.** See **Fischer, Hans.**
- Scherillo, A.**, pegmatites from Masul (Meran), A., 602.
- Schering-Kahlbaum Akt.-Ges.**, isolation of follicle hormone, (P.), B., 254. Germinal-gland hormone derivatives, (P.), B., 254. Acyloctahydrofollicle hormones, (P.), B., 333. Follicle hormone hydrate, (P.), B., 654. Acyl derivatives of dihydrofollicle hormone, (P.), B., 654.
- Schering-Kahlbaum Akt.-Ges.**, hydrogenation products of follicle hormones, (P.), B., 654, 655. Hormones, (P.), B., 654. Mono- and di-acetates of the dihydrofollicle hormone, (P.), B., 655. Hydrogenation products of follicle hormones, (P.), B., 750. Production of a yellow oxidation ferment [enzyme] and a coloured component derived therefrom, (P.), B., 780. Seed disinfectants, (P.), B., 823. Primary phosphates of glyceol [glycine] alkyl esters and *N*-alkyl derivatives thereof, (P.), B., 840. Pregnanolones [from pregnandiol], (P.), B., 878. Isolation of follicle hormones, (P.), B., 925, 974. Whooping-cough vaccines, (P.), B., 975. Therapeutically valuable saturated alcohols from germinal-gland hormones, (P.), B., 1068. Cyclic ketones, (P.), B., 1133.
- and **Chem. Fabr. L. Meyer**, disinfectants and immunising media for seed-grain, etc., (P.), B., 248.
- and **Fischl, S.**, guanidino-fatty acids, (P.), B., 620.
- Scherlin, S. M.**, **Bras, G. J.**, **Jakubovitsch, A. J.**, **Vorobjova, E. I.**, and **Sergeev, A. P.**, acridylarsinic acids and their derivatives, A., 637.
- Jakubovitsch, A. J.**, and **Exemplarsky, L.**, arsenical derivatives of organic sulphides, A., 227.
- Scherman, W.**, use of bone glue as source of nitrogen for yeasts, B., 76.
- Schermer, N. H.** See **Stellum, Inc.**
- Scherpenberg, A. L. van**, edible sugar syrup, (P.), B., 1065.
- Scherrer, H.**, tinning processes for copper wire, (P.), B., 556.
- Scherrer, P.** See **Busch, G.**, and **Pankow, G. W.**
- Scheruhn, W.** See **Sauerbrei, E.**
- Schestakov, A. G.**, and **Schvuindenkov, V. G.**, influence of fertilisers containing large quantities of chlorine on quality and quantity of crop yields, B., 867. Influence of various cations, of chlorides, and of sulphates in nutrient solutions on growth of plants, B., 867.
- Schestakov, G. V.**, reaction between turpentine and stannic chloride, B., 734.
- Schettle, L.**, and **Kliutschkin, N.**, decomposition of cellulose xanthate, B., 299.
- Kliutschkin, N.**, and **Kogan, S.**, preparation of cellulose stearate, B., 299.
- Scheuer, E.**, solubility of sodium in aluminium, A., 928.
- Scheumann, K. H.**, and **Lüdke, W.**, horn-blende synthesis at low pressures, A., 190.
- Scheunert, A.**, **Sachsse, M.**, and **Specht, P.**, action of prolonged administration of food grown with and without artificial manuring, A., 242.
- and **Schieblich, M.**, vitamin-A content of herring, A., 260. Effect of prolonged feeding with tomatoes, A., 1013.
- Schieblich, M.**, and **Reschke, J.**, vitamin-D in edible fungi, A., 1287.
- Scheuring, H.**, calcium metabolism in first phase of blood-clotting. I. Action of oxalate in second phase of blood-clotting. II. Change of state of combination of calcium during production of thrombin, A., 881, 1263.
- Scheuring, L.**, and **Leopoldseder, F.**, action of the principal manure salts on fish, B., 691.
- Schicharevitsch, S. A.** See **Budnikov, P. P.**

- Schicke, W. See Aumüller, W.
 Schickh, O. von. See Binz, A.
 Schicktan, S. T., apparatus for measuring the b.p. of lubricating oils and other compounds of high mol. wt. at reduced pressures, B., 837.
 Schidrowitz, P., and Redfarn, C. A., modified rubbers. VII. Expanded chlorinated rubber, B., 861.
 See also Rubber Producers Res. Assoc., and Ungar, R. M.
 Schiebel, H., insert for diffusers for extraction of sugar from sugar-beet cossottes, (P.), B., 871.
 Schieblch, M. See Scheunert, A.
 Schiebold, E., X-ray analysis of difform and disperse systems (with special reference to electron interference), A., 162.
 Schiedt, B. See Maurer, K.
 Schiefelbusch, A. T. See Coons, C. N.
 Schiemann, G. [with Winkelmüller, W., Baesler, E., Ley, E., and Seyhan, M.], aromaticfluoro-compounds. XX. Fluorophenols, A., 856.
 Schiener, A. See Haberlandt, H.
 Schierholtz, O. J., pressure regulator for vacuum distillation, A., 1098.
 Schiess, A. See Pittard, J. J.
 Schiff, H. See Harrell, J. W.
 Schiff, L. I., and Thomas, L. H., quantum theory of metallic reflexion, A., 908.
 Schiff, M. See Grassevsky, A.
 Schiffer, H. J., alloy steel [for high-temperature boiler plate], (P.), B., 106.
 Schiffett, C. H. See Lind, S. C.
 Schifrin, A. See Antopol, W.
 Schillb, T. W. See Jenkins, R. L.
 Schild, E., composition of the formol-titratable protein-hydrolysis products of malt and barley, B., 1112.
 and Jacob, H., determination of sulphur in grain and feeding-stuffs, B., 1018.
 and Weber, R., changes in metabolic products of pure culture yeasts on repeated propagation, A., 897.
 See also Kolbach, P.
 Schild, H. See Gaddum, J. H.
 Schild, T. See Pauli, W.
 Schildwächter, H., and Martin, Hubert, investigation and evaluation of motor spirits, B., 980.
 Schile, V. N. See Ravikovitch, A. M.
 Schillak, R. See Suszko, J.
 Schillbach, H. See Schütz, W.
 Schiller, G. See Hedvall, J. A.
 Schiller, W., determination of viscosity of water vapour, A., 22.
 Schilling, C., producing a serum for vaccination against trypanosomiasis, (P.), B., 701.
 Schilling, H. K. See Tyndall, E. P. T.
 Schilling, K. See Fries, K.
 Schilov. See under Shilov.
 Schilz, W. E. See Tromp, F. J.
 Schimmel & Co., essential oils, B., 333.
 Schindel, L., and Barth, E., importance of the "Takata reaction" for diagnosis of liver disease in its relation to galactose and bilirubin overloading, A., 1527.
 Schindler, G. See Baur, E.
 Schindler, H. See Raudnitz, H.
 Schindler, W., report of the Committee of the Austrian section [of the I.V.L.I.C.] on hide curing and analysis of oils and fats, B., 322.
 Schintmeister, J., observation of the Brownian movement with the unaided eye, A., 699.
 See also Pettersson, H., and Stetter, G.
 Schinz, H. See Ruzicka, L.
 Schioppa, L., vitamin-E. II. Eutrophic action and vitamin-E activity of rice-husk oil. III. Influence on fertility, A., 670, 1177.
 Schipitzina, G. See Kiesel, A.
 Schipper, A. See Michels, A.
 Schiran, E., and Uniechem Chemikalien Handels A.-G., [higher alkyl]sulphonic acids, (P.), B., 396.
 Schirm, E., cement-burning in the blast kiln, B., 407.
 Schirmer, H. See Wagner, Hans.
 Schirobokov, S. See Krestovnikov, A.
 Schirokaia, V. N., resin of *Nicotiana rustica*, A., 1550.
 See also Schmuck, A.
 Schirov, G. A. See Seheinker, N. S.
 Schischakov, N. A., electrometric analysis of ferrous sulphate solutions, A., 597.
 Structure of the surface of oxidised iron, A., 813. Powder method of electro-nography, A., 839. Electron diffraction by vitreous silica powder, A., 1309.
 Schischkin, V. V., and Krasnopolskaja, E. L., electrodeposition of chromium under pressure, B., 28.
 Schjånberg, E., heats of combustion and refractivity data for chloro-substituted fatty acids and esters; connexion between chemical constitution, heat of combustion, and molecular refraction, A., 449.
 Schkolnik, M. J., need of plants for boron, B., 690.
 Schkurenko, P. P., and Scheinman, R. D., sapropelito coals in the Donetz basin, B., 1122.
 Schlachover, M. See Rogovin, S.
 Schlank, M., separation of gold or other concentrate from sand or other materials, (P.), B., 156.
 Schlapp, W. See Bohn, H., and Deutsch, W.
 Schlatter, H. See Wolf, L.
 Schlee, R. See Hönigsschmid, O.
 Schleede, A., zinc sulphide and zinc cadmium sulphide luminophores and their importance for the problem of television, A., 565.
 Richter, M., and Schmidt, W., zinc oxide as catalyst, A., 830.
 Schlegel, G. See Möller, M.
 Schlegel, H. See Brintzinger, H.
 Schlegel, (Mlle.) Hélène, heterogeneous binary systems. I. System aniline-cyclohexane. II. and III. Physical properties of liquid systems in two layers, A., 25, 292, 695.
 Schleich, H. See Grassmann, W.
 Schleicher, A., qualitative micro-analysis by electrolysis and spectrography, A., 837. Progress in electrothermal industries, B., 507.
 and Brecht-Bergen, N., microchemical spectral analysis in the high-frequency spark, A., 947.
 Schleicher, E. See Szendrő, P.
 Schleimer, O. J. See Roesch, K.
 Schleinitz, M. F. von. See Schmidt, J.
 Schlenk, F. See Euler, H. von.
 Schlenz, H. E. See Babbitt, H. E.
 Schlepakov, B. M. See Jugenburg, A.
 Schlesinger, B., Signy, A. G., and Amies, C. R. [with Barnard, J. E.], aetiology of acute rheumatism, A., 888.
 Signy, A. G., and Payne, W. W., aetiology of acute rheumatism, A., 888.
 Schlesinger, H. I., and Walker, A. O., hydrides of boron. IV. Methyl derivatives of diborane, A., 738.
 Schlesinger, K. See Radio-Akt.-Ges.
 Schleussner, W., decomposition of silver-gelatin complex and its significance for light-sensitivity [of photographic emulsions], A., 712.
 Schliessmann, O., rapid spectroscopic determination of the alloying constituents in special steels, B., 64.
 Schlikova, A. G. See Kaganovskaja, S. N.
 Schlingman, P. F. See Brit. Thomson-Houston Co., and Gen. Electric Co.
 Schlippenbach, F. (Baron) von. See Metallges. A.-G.
 Schlittler, E. See Karrer, P., and Robinson, R.
 Schljakman, M. J. See Zanko, A. M.
 Schlör, J. See Conservenfabr. Lenzburg vorm. Henckell & Roth.
 Schlöter, M., electrodeposition of chromium, (P.), B., 29. Nickel-plating, B., 637. Chemical and physical properties of electrolytically deposited metals in relation to their structure, B., 997.
 Schlossberger, H., therapeutic action of organic arsenic compounds, A., 1533.
 and Schöffner, R., action of arsenopyridine derivatives on resistant strains of trypanosomes, A., 125.
 Schlubach, H. H., and Koenig, K., fructose anhydrides. XV. Constitution of graminin I., A., 69.
 and Schmidt, Herbert, fructose anhydrides. XVI. Identity of inulin from different plants; terminal groups of inulin, A., 1354.
 Schlüter, R. See Hüchel, W.
 Schlüter, T. See Komm, E.
 Schlundt, H., radioactivity of spring water from Hot Springs, Arkansas, A., 953.
 See also Bruner, F. H.
 Schlutius, E., Twitchell's reagent, A., 488.
 Schlutz, F. W., Hastings, A. B., and Morse, M., blood changes associated with physical exhaustion in the normal dog, A., 1404.
 Morse, M., and Oldham, H., influence of fruit and vegetable feeding on iron metabolism of the infant, A., 115.
 Schmalenbach, A., removal and recovery of benzene and naphthalene from gases, particularly coal-distillation gases, (P.), B., 440.
 Schmalfuss, H., and Bussmann, G., 3:4-dihydroxyphenylacetic acid, a metabolic product of the meal-worm (*Tenebrio molitor*, L.) and its detection, A., 646.
 and Werner, Hans, edible extracts from the flesh of sea animals, (P.), B., 827.
 Werner, Hans, and Gehrke, A., ketone formation in purified fats. IV., B., 416.
 Schmaltz, D., colloid chemistry of compounds of sugars and fatty acids, particularly glucose stearate, A., 821.
 Schmanenkov, I. V., and Blashenova, A. N., desulphuration of metallurgical coke. IV., B., 292.
 and Zverev, L. V., use of burned limestone in the blast furnace, B., 676.
 Schmechel, S. See Berg, P.
 Schmeckebier, M. M. See Max, P.
 Schmeidler, R., [solubility of] commercial disodium phosphate crystals, B., 20.
 Schmeling, F., influence of solvents on hydrogenation of montan wax under pressure, B., 392. Determination of ash in used lubricating oils, especially those containing water, B., 890.
 Schmelkes, F. C., and Horning, E. S., bactericidal action of azochloramide (NN-dichloroazodicarbonamidine), A., 900.

- Schmelkes, *F. C.*, and Wallace & Tiernan Co., Inc., supplying chloring gas, (P.), B., 452. and Wallace & Tiernan Products, Inc., *N*-chloro-compound and its use in sterilisation, (P.), B., 287. See also Baker, *J. C.*, and Wallace & Tiernan Products, Inc.
- Schmellenmeier, *H.*, radiation of resonance lines in the sodium discharge and production of an absolute light unit, A., 555.
- Schmeller, *J.*, and Schmeller Holding Co., metal working [remelting of scrap aluminium], (P.), B., 274.
- Schmeller Holding Co. See Schmeller, *J.*
- Schmelzer, *W.*, physico-chemical properties of *Digitalis* glucosides; capillary activity and influence on the permeability of Traube's membrane, A., 527. See also Lendle, *L.*
- Schmid, *E.* See Guyer, *A.*
- Schmid, *Erich*, and Siebel, *G.*, separation of components from supersaturated light-metal alloys, B., 678.
- Schmid, *H.* See Abel, *E.*
- Schmid, *K.*, soils and plants of diseased sisal stock in E. Africa, B., 516.
- Schmid, *L.*, and Kemeny, *C.*, chemistry of the flowers of the mullen (*Flores verbasci*). III, A., 1435. and Körpeth, *H.*, amber. III, A., 754. and Margulies, *S.*, gossypol, A., 984. See also Späth, *E.*
- Schmid, *O.* See Ruggli, *P.*
- Schmid, *R.*, and Gerö, *L.*, $B^1\Sigma \rightarrow A^1\Pi$ and $C^1\Sigma \rightarrow A^1\Pi$ bands of carbon monoxide, A., 555. Zeeman effect and position of perturbation in the $A^1\Pi$ state of CO, A., 679. Predissociation in the $C^1\Sigma$ state of CO, A., 1299. 5 *B* Bands of carbon monoxide, A., 1299.
- Schmid, *W.*, soda-smelting furnaces, B., 186. Horizontal rotary digesters with forced liquor circulation, B., 705.
- Schmid, *W. E.*, X-ray study of the fine-structure of metals, B., 502.
- Schmidt, *A.* (Cernauti), oxidisability and iodine values for differentiating fermentation and distillation vinegar, B., 872.
- Schmidt, *Albert*, energy and capacity for work of explosives on detonation, B., 607.
- Schmidt, *Arthur*. See Simon, *K.*
- Schmidt, *Arthur* (Stade), Deseniss, *M.*, and Deuts. Tornesit-Ges.m.b.H., [chlorinated rubber] coating materials, (P.), B., 195.
- Schmidt, *A. R.* See Woodrow, *J. W.*
- Schmidt, *B.* See Sauerwald, *F.*
- Schmidt, *C. F.*, intrinsic regulation of circulation in the hypothalamus of the cat, A., 530.
- Schmidt, *C. F., jun.*, formation of fatty acids from glucose by *Aspergillus niger*, A., 1166.
- Schmidt, *C. L. A.* See Dalton, *J. B.*, Emerson, *O. H.*, Greaves, *J. D.*, Jukes, *T. H.*, Main, *R. K.*, Mehl, *J. W.*, and Winnek, *P. S.*
- Schmidt, *Erich*, Hecker, *M.*, Jandebeur, *W.*, and Atterer, *M.* [with Simson, *W.*, and Schnegg, *R.*], determination of carboxyl groups of cellulose by conductometric titration, A., 201.
- Schnegg, *R.*, Jandebeur, *W.*, Hecker, *M.*, and Simson, *W.* [with Pedlow, *J. W.*, and Atterer, *M.*], cellulose of native composition from cotton wool. I, A., 610.
- Schmidt, *Ernst*, and Piening, *W.*, behaviour of alkaline accumulators at low temperatures, B., 638.
- Schmidt, *E. K. O.*, protection of duralumin in aeroplane construction, B., 194.
- Schmidt, *E. W.*, physiology and pathology of "leaf yellows" of sugar beet, A., 674. Physiology of germination of sugar beet, A., 1043.
- Schmidt, *F.*, X-rays from a Lenard tube with a platinum attachment, A., 685.
- Schmidt, *F. A. F.*, energy constants of a gas in the region of dissociation, A., 918.
- Schmidt, *F. C.* See Kraus, *C. A.*
- Schmidt, *G.* See Merz, *K. W.*
- Schmidt, *Gerhard* (Berlin), influence of common impurities on notched impact strength of technical iron, B., 230.
- Schmidt, *Gerhard* (Graz). See Pestemer, *M.*
- Schmidt, *Gerhard* (Leipzig), dynamic method for investigation of surfaces of powders (motion of loose powders in revolving bulbs), A., 467.
- Schmidt, *Günter*, uric acid content of blood, A., 514.
- Schmidt, *H.* (Marburg), internal-complex salts in medicine, B., 123.
- Schmidt, *Harry*, and Schulz, *L.*, stereo-isomerism in the pinocampheol and menthol series, A., 349.
- Schmidt, *Herbert*. See Schlubach, *H. H.*
- Schmidt, *J.* (Göttingen), Lauprecht, *E.*, and Winzenburger, *W.*, composition of pasture grasses under intensive grazing systems, B., 522.
- and Schleinitz, *M. F. von*, composition, digestibility, and nutrient value of various kales, B., 699.
- Schleinitz, *M. F. von*, and Lagneau, *E.*, nitrogen balance of growing pigs fed with dried yeast, soya-bean, and groundnut cake, B., 78.
- Schmidt, *Josef*. See Butenandt, *A.*
- Schmidt, *Jürgen*, detection and determination of small concentrations of carbon monoxide, B., 60.
- Schmidt, *J. C.* See Rose, *R. E.*
- Schmidt, *J. E.*, and Krantz, *J. C., jun.*, influence of caesium ions on oxygen demand of sewage, B., 431.
- Schmidt, *K.*, silage feeding, B., 521.
- Schmidt, *Kurt*, and North American Rayon Corp., wet treatment of artificial silk cakes, (P.), B., 448.
- Schmidt, *K. F.* See Knoll, *A.-G.*
- Schmidt, *L. H.*, nature of difference in phospholipin content of oxalated and heparinised plasma, A., 880. Phospholipin content of liver, skeletal muscle, and whole blood, as affected by thyroxine injections, A., 1171.
- Schmidt, *M.* (Grossbeeren). See Reinhold, *J.*
- Schmidt, *Max*, alcohol. II. Concentration in blood, A., 244.
- Schmidt, *O.*, collision of K^+ ions with inorganic and organic gas particles. I. Elastic and inelastic collision. II. Mechanism of the collision process, A., 5. Internal energy relationship of aromatic carbocyclic compounds. I. II. Stability and reactivity of cyclic polyolefines. III. Experimental foundations of the double linking rule; fission of sugars. IV. Law of distance. V. Resonance effect. VI. Fission in the hexaphenyl-ethane and sugar series on the basis of the double linking rule. VII. Laws of coupling of paired and unpaired *B* electrons. VIII. Formation of vitamin-A and the double linking rule, A., 73, 203, 329, 480, 612, 852, 1286. Technical reactions. IV. Substitution rules in aromatic compounds, A., 74. Mechanism of catalytic hydrogenation, A., 940.
- Schmidt, *O. T.*, methylation of trihydroxy-glutaric acid and tartaric acid with diazomethane, A., 196.
- and Heintz, *K.*, sugars with branched carbon chains. V. Synthesis of hamamelonic acid, A., 197.
- and Weber-Molster, *C. C.*, sugars with branched carbon chains. III. Configuration of the two fructoheptonic acids and hamamelose. IV. Optical behaviour of aldonic acids in presence of sodium molybdate, A., 196.
- and Zeiser, *H.*, configuration of digitalose, A., 200.
- Schmidt, *P.*, Weyrauch, *F.*, Necke, *A.*, and Müller, *Herbert*, determination of small amounts of lead, A., 950.
- Schmidt, *R.*, accurate control of [flour] ashing, B., 697. See also Haack, *D.*
- Schmidt, *R.* (Freiberg i. Sa), preparation of hydrogen from gaseous hydrocarbons with brown-coal coke as catalyst, B., 292. Low-temperature tar from brown coal, B., 836.
- Schmidt, *Richard*, and Agfa Anseo Corp., obtaining different gradations in developing silver halide emulsion layers, (P.), B., 702.
- Schmidt, *S.*, action of some organic compounds on bacterial toxins, A., 665. Adsorption of purified diphtheric vaccines by aluminium hydroxide, A., 1003. See also Steinkopf, *W.*
- Schmidt, *T.* See Schüler, *Herman*.
- Schmidt, *W.* (Bitterfeld), and Vosskübler, *H.*, creep tests on supersaturated solid-solution [alloys] of magnesium, B., 954.
- Schmidt, *W.* (Leipzig). See Schleede, *A.*
- Schmidt, *Walter*. See Fischer, *Hans*.
- Schmidt, *Wilhelm*. See Brezina, *E.*
- Schmidt Ges.m.b.H., *K.*, furnaces, (P.), B., 753. See also Metallges. Akt.-Ges.
- Schmidt-Hebbel, *H.*, bacteriological evaluation of disinfectants, B., 656. Chemical detection of fuels in cases of arson, B., 1123.
- Schmidt-Nielsen, *S.*, treatment of oils of marine origin, (P.), B., 561.
- Flood, *A.*, and Stene, *J.*, size and fat and vitamin-A content of the liver of *Teleostei*, A., 414.
- Schmidtill, *E.*, oolitic iron ores in the Dogger sandstone of the Jura Mountains, B., 904.
- Schmierer, *E.*, and Baker Perkins Co., Inc., apparatus for dissolving xanthate, etc., (P.), B., 1077.
- Schmieschek, *U.*, experimental proof of the vibrational movements of physical molecules, A., 284.
- Schmitt, vapour pressure of hydrocarbons, A., 157.
- Schmitt, *F.* See Glatzel, *H.*
- Schmitt, *F. O.*, Bear, *R. S.*, and Clark, *G. L.*, rôle of lipins in the X-ray diffraction patterns of nerve, A., 1145.
- Clark, *G. L.*, and Mrgudich, *J. N.*, X-ray diffraction studies on nerve, A., 231.
- Kerr, *R. S.*, and Bueker, *E. D.*, gaseous metabolism of frog kidney, A., 890.
- and Skow, *R. K.*, arsenite action on medullated nerve, A., 1412.
- and Wade, *L. J.*, solvation and desolvation of nerve, A., 1145.
- Schmitt, *H.*, and Lux, *L.*, technical possibilities for application of the Eloxal (anodic oxidation) process, B., 681.

- Schmitt, J. B. See Ginsburg, J. M.
- Schmitt, L., effect of dicyanodiamide in calcium cyanamide [fertiliser], B., 325.
- Schmitt, P., petrogenesis of the Franconian Wellenkalk, A., 842.
- Schmitt, R., influence of small excesses of zinc or magnesium on age-hardening of alloys of aluminium with $MgZn_2$, B., 771.
- Schmitz, A., determination of the unit of heparin, A., 1024. Heparin: a chondroitinpolysulphuric acid, A., 1394. and Kühl, L., inactivation of heparin in blood, A., 1024.
- Schmitz, H. See Buckman, S. J.
- Schmitz-Dumont, O., constitution of dimeric indoles, A., 225. and Horst, I. ter, polymeric indoles, A., 502. and Pateras, S., complex pyrrolo- and indolylo-salts, A., 1335.
- Schmitt-Hillebrecht, E. See Helferich, B.
- Schmolke, H., designation of Nernst's heat theorem as a third law of thermodynamics, A., 1323.
- Schmuck, A., determination of citric and malic acids in tobacco and makhorka, A., 133. Carbohydrates of tobacco, A., 133. Alkaloids accompanying nicotine and methods for determining them, A., 133. Electrolysis in isolation of plant products, A., 1549. Indices of quality of tobacco, B., 124. Tobacco and makhorka (*Nicotiana rustica*) as material for the extraction of citric acid, B., 124. Preparing citric acid from *Nicotiana rustica*, B., 1164. and Korsheniovski, G. A., use of stem and stalk of tobacco, B., 1118. Utilisation of tobacco stems, B., 1164. and Schirokaja, V. N., fractionation of resins of tobacco and makhorka, A., 133. and Smirnov, A. P., standardisation of tobacco by chemical properties, B., 124.
- Schmucker, T., influence of boric acid on plants, especially on germinating pollen grains, A., 552.
- Schmuk. See under Schmuck.
- Schmutz, F. C., primers for exterior house paints, B., 238.
- Schnabel, C. F., [chicken] feed, (P.), B., 123.
- Schnabel, E., cleaning agent, (P.), B., 880.
- Schnecko, O. See Schwalbe, W.
- Schneider, J. G., and Ivy, A. C., effect of methylhistamine and hydroxyethylglyoxaline on gastric secretion and blood-pressure in the dog, A., 1411.
- Schneer, I. M. See Ushakov, S. N.
- Schnegg, R. See Schmidt, Erich.
- Schneider, A. See Zintl, E.
- Schneider, Adolf, iron hammer-scale as a rust-protecting pigment, B., 641.
- Schneider, Albert, and Gaisser, F., preparation of water for industrial purposes of all kinds, especially boiler feed-water, (P.), B., 882.
- Schneider, E. (Freiburg), and Widmann, E., relation of vitamin-A and its precursor to liver disorder and to resistance to infection, A., 792.
- Schneider, Erich, quenching of fluorescence of liquids by halogen ions, A., 681.
- Schneider, Ernst. See Behaghel, O.
- Schneider, F., and Kheifetz, A., increased yield of petroleum sulphonic acids on adding naphthenic acids to the oil to be sulphonated, B., 392.
- Schneider, G., and Celanese Corp. of America, sound record, (P.), B., 110. Preparation of derivative of cellulose [moulding] composition, (P.), B., 69. See also Beran, C. F., Celanese Corp. of America, and Dreyfus, C.
- Schneider, H., feeding of rhubarb leaves to rabbits, sheep, goats, and hens, B., 972.
- Schneider, Herman. See Sperti, G., and Whitmore, W. F.
- Schneider, J. Z., and Slezák, J., heavy water in Czechoslovakian mineral waters, A., 953.
- Schneider, K. See Pfeiffer, P.
- Schneider, L., light structural slabs, (P.), B., 806.
- Schneider, L. (München). See Diemair, W.
- Schneider, O. See Erdheim, E.
- Schneider, W., protection [of metals] against corrosion, B., 636.
- Schneiderman, H. See Curtman, L. J.
- Schneiderwirth, H. J., 3:6-diamino-2-alkylpyridines, (P.), B., 894.
- Schnell, R. See Forsgren, E.
- Schnell, W. G., luminous highway paint, B., 598.
- Schnelle, F., and Heiser, F., influence of different time of harvesting on wheat quality, B., 570.
- Schneller, H., coagulation of hydrosols of silver bromide and silver iodide, A., 821.
- Schnetka, M., detection of pasteurised milk; determination of duration of pasteurisation, B., 825.
- Schnetz, H., influence of metals on adrenaline hyperglycaemia in rabbits, A., 1021. See also Häusler, H.
- Schneitzler, K., nuclear processes in lithium on bombardment with α -rays, A., 1049.
- Schniedermann, J., thermo-electric effect with palladium-silver alloys charged with hydrogen, A., 689.
- Schniepp, L. E., and Marvel, C. S., reactions of δ -aminovaleric acid and its derivatives, A., 1356. Di-*p*-alkylphenyldiphenylene-ethanes: effect of the *p*-alkyl group on the dissociation of the ethane, A., 1358.
- Schnitger, H., current-voltage relation for the spray discharge, A., 1292.
- Schnitker, M. A., and Emery, E. S. jun., fat-tolerance tests and blood-sugar determinations on patients with peptic ulcer; etiology of peptic ulcer, A., 1271.
- Schnitzer, R., avidity determination of new arsenobenzene preparations (myosalvarsan, solusalvarsan), A., 120.
- Schnoor, H. H., coal-tar solvents, B., 598.
- Schnorbusch, M. T., comparative volumetric and gravimetric determinations of blood-fat, A., 517.
- Schnorrenberg, E. See Stackelberg, M. von.
- Schnurmann, R., determination of magnetic moments of molecules by the molecular-ray method, A., 679.
- Schobbert, H. See Weitz, E.
- Schober, K. See Sekera, F.
- Schober, O., and Amer. Lurgi Corp., colouring and protective coating, (P.), B., 110. See also Metallges. Akt.-Ges.
- Schoch, E. P., extraction of salts from minerals [polyhalite], (P.), B., 452. Potassium sulphate from polyhalite, B., 589. Treatment of polyhalite with calcium carbonate, (P.), B., 672. Wall plaster, (P.), B., 1097.
- Schock, E. D., Jensen, H., and Hellerman, L., inactivation of insulin; effects of certain metal derivatives and of thiol compounds, A., 1543.
- Schockaert, J. A., and Lambillon, J., presence of a substance antagonistic to vasopressin in serum of pregnant women, A., 1171. and Lejeune, A., vasopressin content of the pituitary of the normal guinea-pig, and after injections of folliculin or thyroxine, A., 1171.
- Schöberl, A., and Eck, H., hydrolytic fission of the disulphide linking, A., 1106.
- Schöbensch, O. See Mihăilescu, C.
- Schöller, R. See Wenusch, A.
- Schoeller, W., and Goebel, H., effect of estrogenic substances on plants. IV., A., 1039. Serini, A., and Gehrke, M., constitution of dehydroandrosterone, A., 981.
- Schoeller, W. R., analyses of tungsten ores, B., 997. and Waterhouse, E. F., analytical chemistry of tantalum, niobium, and their mineral associates. XXVIII. Separation of rare earths from earth acids, A., 838. See also Powell, Alan R.
- Schoeller, Ges.m.b.H., H. A., safety papers, (P.), B., 1041.
- Schön, and Béraud, P., hydrolysis and fermentation of sawdusts. I., B., 1064. Béraud, P., and Bréchet, P., hydrolysis and fermentation of sawdusts. II., B., 1064.
- Schoen, J. See Dziewonski, K.
- Schön, K., carotenoids. I. Carotenoids of *Diospyros* fruits. II. Carotenoids of *Arbutus* fruits, A., 1040. See also Kuhn, R., and Winterstein, A.
- Schoen, V. A., and Light Sensitive Apparatus Corp., oil tester using radio-frequency, (P.), B., 295.
- Schön, W. See Hess, K.
- Schönberg, A., [diradical formula of rubrene], A., 335. Reactions of organic disulphides and oxidation of organic compounds in presence of disulphides, A., 339. Photochemical formation of diradicals, A., 986. and Michaelis, R., pyrolysis; elimination of two hydroxyl groups from a glycol, A., 1504. and Nickel, S., chromone chlorides and dichromylenes, A., 91. and Urban, W., microchemical colour reaction of elementary sulphur, A., 184. Organic compounds of sulphur. XXV. Interaction between organic azides and aromatic thioketones and a new method of converting the azido-group into the amino-group, A., 742.
- Schoenberg, D., Hall and magneto-resistance effects, A., 813. Limitations of crystal symmetry on physical phenomena with particular reference to diamagnetic magnetostriiction, A., 813. Magnetostriiction of bismuth single crystals, A., 1195.
- Schoenberg, V. A., liquid-testing methods and apparatus, (P.), B., 51. Viscosimeter, (P.), B., 291. Determining the colour value of liquids, (P.), B., 755.
- Schönberger, S., absorption of light by carbon monoxidechromogens, A., 999.
- Schoene, W. J., and Jefferson, R. N., tests of contact insecticides on eggs of the peach moth and codling moth, B., 742.

- Schoenebeck, O. von, stabilisation of carbonylase solutions, A., 897.
and Neuberger, C., stabilisation of carbonylase solutions, A., 401.
- Schöneberger, R. See Brückner, H.
- Schoenefeldt, O., and Alten, F., importance of technique and soil science in German water economy, B., 420.
- Schoenfeld, F. K., surface chemistry of carbon black; effect on vulcanisation of rubber, B., 685.
- Schönfeld, H., effect of fat and protein on fasting hypoglycemia in infants, A., 523. Hormonal regulation of blood-sugar in infants, A., 1283.
- Schönfelder, R., sulphur separator, (P.), B., 948.
- Schönfeldt, N. See Engelhardt, F.
- Schoenheimer, R., action of iodides on sterol dibromides and preparation of cholestenone, A., 1120.
- Dam, H., and Gottberg, K. von, absence of allocholesterol in the organism, A., 1264. Absorbability of allocholesterol, A., 1264.
- and Rittenberg, D., deuterium as an indicator in study of intermediary metabolism. I., II., and III., A., 1407.
- Rittenberg, D., and Graff, M., deuterium as an indicator in study of intermediary metabolism. IV., A., 1407.
- See also Sperry, W. M.
- Schöntag, A. See Scheibe, G.
- Schöpf, C., and Braun, Willi, samandarine, the principal alkaloid in poison of fire and alpine salamanders, A., 97.
- and Lehmann, G., synthesis of tropinone, ψ -pelletierine, lobelanine, and related alkaloids under physiological conditions, A., 873.
- and Thierfelder, K., aldol condensation between aldehydes and β -keto-acids, and their importance in the biosynthesis of natural products, A., 981.
- Schoepfle, G. K., extension of the platinum I-like isoelectric sequence to tellurium IV, lead V, and bismuth VI, A., 2.
- Spectra of Pb IV and Bi V, A., 424.
- Schöpp, K. See Euler, H. von, Karrer, P., and Theorell, H.
- Schofield, F. H., f.p. of platinum, A., 21.
- Schofield, R. K., metaphosphoric acid and proteins, A., 300.
- and Blair, G. W. S., influence of the proximity of a solid wall on consistency of viscous and plastic materials. IV., A., 1455. Effect of viscosity variation on rupture of plastic bodies, B., 833.
- Schoklitsch, K., mineral carbonates, A., 1194. Micro-analysis of silicates. I. Determination of silicic acid, A., 1472.
- Scholder, R., and Denk, G., salts of hyposulphurous acid, A., 460. Decomposition of hyposulphurous acid and its salts, A., 460. New decomposition of hyposulphite and cobalt sulphoxylate, A., 461.
- and Pätisch, R., amphoteric behaviour of metal hydroxides. VIII. Chromites. IX. Solubility of barium hydroxide in sodium hydroxide solutions, A., 35, 577.
- and Pattoek, K., addition of hydrogen phosphide to cuprous and silver halides, A., 49.
- Scholefield, F., and Ward, D., kier-boiling efficiency, B., 625.
- See also Turner, H. A.
- Seholes, S. R., use of cyanite in crucibles for glass-melting, B., 1142.
- See also Breeman, L., jun., and Cole, S. S.
- Scholl, R., Böttger, O., and Stix, E., supposed arylperipyrrolinoanthroxyls as derivatives of benzoylene- $\beta\beta'$ -benzopyrrole and the violet products of reduction of 1-cyanoanthraquinones, A., 93.
- and Donat, J., supposed aryloxyperihydrofuranoanthroxyls as derivatives of benzoylene- $\beta\beta'$ -benzofuran. II., A., 92. Morphanthridones. VI. Dehydration and cyclisation of 1:5-di-m-xyloanthraquinone-mono- and -di-oxime to dimethyl-m-xyloylo-5:10-benzoylenemorphanthridone and tetramethyl-5:10-10':5' -dimorphanthridonylene, A., 992.
- and Meyer, H. K., synthesis of 8:9-benzoylene-3:4-phthalylphenanthridine-5-carboxylic acid, A., 1132.
- and Müller, E. J., morphanthridones. VII. Dehydration of 1-aroalloylo-chrysoketoneoximes to 6:7-benz-5:10-phenylenemorphanthridones, A., 992.
- and Müller, E. J. [with Stix, E.], isomerism of oximes of 1-aroalloylanthraquinones and benzoylenemorphanthridone, V., A., 869.
- Müller, E. J., and Böttger, O., oxidative degradation of violanthrone and 2:2'-dibenzanthronyl to 2:2'-dianthraquinonyl-1:1'-dicarboxylic acid; synthesis of this acid from 2-bromo-1-cyanoanthraquinone and its conversion into 1:2:7:8-diphthaloylphenanthridone, A., 348.
- Scholl, W., and Davis, R. O. E., saturated solutions of carbamide in liquid ammonia; vapour pressures and compositions from -26.4° to 101.0° , A., 159. Six-atmosphere mercury manometer, A., 599.
- See Davis, R. O. E.
- Schollenberger, C. J., burette assembly for standard reducing solutions, A., 840.
- Scholten, H. See Brækken, H.
- Scholtz, H. F., physical properties of the cove soils of the Black Rock forest, B., 1156.
- Scholz, C., constitution of corynanthine, A., 996. Constitution of yohimbine, A., 1138.
- Scholz, G., metabolism trials with suckling pigs, A., 1154.
- Scholz, H. F. See Wilde, S. A.
- Scholz, W., can drought be counteracted by manuring? B., 324. Practical significance of the so-called harmony of [plant] nutrients, B., 689.
- Schommer, W. See Dilthey, W.
- Schonebaum, C. W., behaviour of colloids in raw beet-sugar juice in various methods of purification, B., 518. Colloidal clarification of raw beet juice, and its bearing on the isoelectric point, B., 692.
- and Moen, W. H. G., removal of colloids from beet juice by various methods of clarification, B., 1014.
- Schönhöfer, F. See Kikuth, W.
- Schoofs, F., toxicity of calcium cyanamide, A., 1412.
- Schoonover, J. W., and Ely, J. O., enzymes in cancer; β -glycerophosphatase of the erythrocytes, A., 1148.
- Schoorl, N., differentiation of chloroform and carbon tetrachloride, A., 958. Colour reactions for pyrimidone, A., 999.
- Schopfer, W. H., synthesis of a growth factor by a micro-organism, A., 256. Effect of growth-factors on *Mucorineae*, A., 406. Identification of a fungal carotenoid, A., 406. Growth factor from wheat germ: extraction by lead acetate: action on a fungus, A., 534. Crystallised vitamin-B as a growth hormone for micro-organisms (*Phycomyces*), A., 534. Test for vitamin-B₁, A., 544. Growth-factor for micro-organisms, A., 663. Preparation of wheat extracts containing a growth-factor for micro-organisms, A., 663. Preparation by dialysis of the growth-factor for micro-organisms; its existence in the anther of various flowers, A., 663. Action of urinary growth-factors; action on a micro-organism, A., 786. Auxogenic action of vitamin-B₁ on a micro-organism, A., 1027. Vitamins and growth-factors in plants; growth-factor content of spores of *Phycomyces*, A., 1039. Utilisation of growth factors by micro-organisms; biological synthesis of growth factors, A., 1166. Crystalline vitamin-B₁ as growth-hormone for micro-organisms (*Phycomyces*), A., 1175. Growth factors; influence of vitamin-B₁ and wheat-germ oil on *Mucorineae*, A., 1175. Solubility of growth factors from micro-organisms, A., 1289. Rôle of vitamin-B₁ in nitrogenous metabolism of *Phycomyces*, A., 1540.
- Schopmeyer, H. See Fulmer, E. I.
- Schopper, E., elementary electric charge, A., 279. Determination of the elementary electric charge, A., 804.
- Schorger, A. W., and Burgess Labs., Inc., C. F., artificial zeolites, (P.), B., 306.
- Schorigin, P. P., and Belov, V., benzoates of N- β -hydroxyethylaniline, A., 854.
- and Hait, E., acetylation of chitin, A., 849.
- and Korschner, V., ethers of hydroxyaldehydes and their acetals, A., 846.
- and Kreschkov, A. P., hydroxy-acids obtained by atmospheric oxidation of paraffin. II., A., 196.
- and Makarova-Semljanskaja, N. N., deamination of chitin and glucosamine, A., 849.
- and Makarova-Semljanskaja, N. N., [with Anurjeva, V.] methyl ethers of chitin, A., 849.
- and Smirnov, A. T., new products of condensation of glycerol with aromatic compounds, A., 81.
- and Smoljaninova, E. K., preparation of vanillin from sawdust and sulphite liquor, A., 750.
- Sehorstein, H., nutrient condition of some heavy soils, B., 1107.
- See also Scharrer, K.
- Schostakovski, M. F. See Orlov, N. A.
- Schoszberger, F., copper amalgam CuHg with the γ -brass structure, A., 920.
- Schotlitsch, K., pyromorphism of inclusions in volcanic rocks, A., 323.
- Schott, M. See Haywood, C.
- Schottky, H., welding of heat-resistant steel alloys, B., 1097.
- Schottky, W., current-producing processes in concentration gradients in solid electrolytes, A., 936. Mechanism of ionic movement in solid electrolytes, A., 1302. Theory of thermal disarrangement in crystals, A., 1305.
- See also Waibel, F.

- Schou, H., shortening of dough, (P.), B., 827.
- Schou, S. A., preparation and stability of Dakin's solution, B., 1022.
- and Abildgaard, J., differentiation of natural and synthetic honey, B., 378.
- and Bendix-Nielsen, L., purity of paraffin oils, B., 7.
- See also Jacobsen, A.
- Schouls, (Mlle.) G., statistical mechanics applied to calculation of entropy of rigid gas molecules, A., 157. Application of statistical mechanics to thermodynamics of a gas, A., 815.
- Schouten, C., structures and textures of synthetic replacements in "open space," A., 725.
- Schouten, J. F., quantitative tetrachromatic theory [of colour vision]. I, A., 1055.
- Schoutissen, H. A. J., character of the diazonium group; preparation of benzaldehyde-*p*-diazonium sulphate and its condensation with benzene to form triphenylmethane derivatives, A., 338. Preparation of the hydrochloride of *m*-dihydrazinobenzene through the bis-diazonium compound from *m*-phenylenediamine, A., 482. Character of the diazonium group; preparation of disazo-dyes from *m*-phenylenediamine, A., 743.
- Schowalter, H. E., and Delamatter, W. W. [with Schwartz, H. A.], composition and critical temperature of pearlite containing 1% of silicon, B., 152.
- Schpakovski, B. G., dispersion of ultrasonic waves in a liquid, A., 20.
- Schpanski, V. A. See Gorski, I. M.
- Schpikelman, A. I. See Tschirkov, S. K.
- Schpunt, S. J. See Belopolski, A. P.
- Schrader, A. L., effect of nitrogen, potassium, and phosphorus on keeping and shipping quality of fruit, B., 117.
- Schrader, G. A., modification of the Hagedorn-Jensen method for semi-macro-quantities of glucose, A., 329. Relation of vitamin-B to carbohydrate metabolism, A., 415.
- Schrader, H., evaluation of tragacanth, B., 823.
- See also Houdremont, E.
- Schrader, J. H., fortification of milk with vitamin-D, B., 698.
- Schrader, L. F., Hart, F. P., and Semet-Solvay Eng. Corp., by-product coke oven, (P.), B., 8. Coke oven, (P.), B., 8.
- Schraiber, M. S. See Bolotnikov, S. M.
- Schramek, W., reaction metal hydroxide solution-cellulose fibre. I. Comparison of X-ray results with equilibrium measurements of metal hydroxide distribution in the system fibre-solution, A., 29.
- and Görg, H., reaction metal hydroxide solution-cellulose fibre. II. X-Ray investigation of the reversibility of the lattice transformation in sodium-cellulose, A., 1074.
- and Küttner, F., X-ray examination of transformation of sodium cellulose by action of carbon disulphide, A., 1486.
- Schramm, W. See Honecamp, F.
- Schramm, Walter, chemistry and practice of [photographic] fixing process, B., 655.
- Schraatz, E., biology of halophytes. I. Physiology of germination. II. Water economy, A., 266, 671.
- Schrauth, W., and Unichem Chemikalien Handels A.-G., [coloured] shoe-blackings, polishing waxes, etc., (P.), B., 734.
- Schreiber, G. See I. G. Farbenind. A.-G.
- Schreiber, H., photochemical process for measuring ultra-violet radiation, A., 178.
- Schreiber, R. S., and Shriner, R. L., anomalous mutarotation of amino salts of *d*-camphor-10-sulphonic acid. I. Attempted resolution of trisubstituted nitrogen compounds. II. Ketimine formation from amino salts of *d*-camphor-10-sulphonic acid. III. Reduction of ketimines of *d*-camphor-10-sulphonic acid; formation of sultams, A., 1118, 1246, 1503.
- Schreiberg, L. See Blank, I. H.
- Schreier, K. F., stable malt and malt product [diastatic flour], (P.), B., 77.
- Schreiner, E. J., possibilities of improving pulping characteristics of pulp woods by controlled hybridisation of forest trees, B., 516.
- Schreiner, H. See Skrabal, A.
- Schreiner, L., and Sieverts, A., systems $\text{BcSO}_4\text{-H}_2\text{O}$ and $\text{BcSO}_4\text{-H}_2\text{SO}_4\text{-H}_2\text{O}$, A., 1322.
- Schreiner, O., and Skinner, J. J., adaptation of fertilisers for cotton soils, B., 918.
- Schrenk, H. H. See Yant, W. P.
- Schreus, H. T., and Poullain, H., dependence of urinary porphyrin excretion in lead-poisoned rabbits on acid-base economy, A., 531.
- Schretter, V. R., kukersite shales in Estonia, B., 1028. Technology of shale, B., 1028.
- Schroeder, E. F., Munro, M. P., and Weil, L., glyoxalase. V. Enzymic nature of kidney antiglyoxalase, A., 1026.
- See also Woodward, G. E.
- Schroeder, H., and Hermann, F., carbohydrates and carbohydrate metabolism in leaves. III. Determination of glucose and fructose in mixed solutions; application to extracts of plant organs, A., 133.
- See also Böger, A., Stepp, W., and Wendt, H.
- Schroeder, J. von, present state of tannin analysis, B., 963.
- Schroeder, R., red copper ore and plagioclinal hemihedry, A., 1478.
- Schröder, W., and Schackmann, H., ternary systems cerous sulphate-alkali sulphate-water. I. Cerous sulphate-potassium sulphate-water, A., 36.
- Schroeder, W. C., Gabriel, A., and Partridge, E. P., solubility equilibria of sodium sulphate at temperatures of 150° to 350°. I. Effect of sodium hydroxide and sodium chloride, A., 1314.
- Schrödinger, E., contributions to Born's new theory of the electromagnetic field, A., 912.
- Schröer, E., and Becker, Gerhard, critical state. V. Viscosity in critical state, A., 925.
- Schroeter, H. See Maurer, K.
- Schropp, W., importance of cultivation of fat-, oil-, protein-, and fibre-yielding plants, B., 1157.
- and Soukup, H., deficiency experiments in water cultures. II., A., 1289.
- See also Scharrer, K.
- Schteingart, M. See Udaondo, C. B.
- Sehtrom, D., utilisation of acid sludge obtained in refining cracked gasoline with sulphuric acid, B., 1031.
- Schtschepkin, G. See Ereimejev, M., and Kurtschatov, I. V.
- Schtscherbakov, A. P., influence of microelements on distribution of calcium, magnesium, and phosphates in plants, A., 1179.
- Schtscherbakov, I. A. See Krivobabko, I. P.
- Schtscherbakov, I. G., and Yamakova, L. V., hydrolysis of magnesium chloride during drying of $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$, B., 99.
- Schtscherbatschev, K. D., analysis of aminoazobenzene, B., 137. Determination of phenol in salicylic acid, B., 664.
- Schtschetinina, L. A. See Tsipin, G. S.
- Schtschigelskaja, M. See Tischtschenko, D. V.
- Schtschigol, M., volumetric determination of mercury, A., 838, 950. Fractional reaction for mercury, A., 950.
- Schitsholkin, K. See Sokolik, A.
- Schube, P. G., colloidal carbon flocculation test in spinal fluid, A., 1402.
- See also Grant, L. F.
- Schubert, C. See Schramek, W.
- Schubert, H., and Cruse, K., quantitative spectrum analysis of elements; tin-lead mixtures, A., 463.
- Schubert, M. P. See Goddard, D. R.
- Schubert, R. See Stather, F.
- Schubin. See under Shubin.
- Schubnikov, L. V., and Tschotkevitch, V. I., specific heat of superconducting alloys, A., 1312.
- See also Rjabinin, G. N., Rudenko, N. S., and Trapeznikova, O. N.
- Schuch, F., pure hydrofluoric acid, B., 451.
- Schuch, K. A. See Nowack A.-G., A.
- Schuchardt, W., degradation of α - and β -glycerophosphate by fresh yeast and by dissolved yeast-enzymes, A., 1026.
- and Vercellone, A., behaviour of mono- and di-phosphoglyceric acid with haemolysed red cells and organ fluids, A., 403. Biochemical degradation of diphosphoglyceric acid, A., 659.
- See also Neuberg, C.
- Schuchovitzki, A. A., variation method of calculating energy of atomic systems, A., 1058.
- Schuck, G. See Miekeley, A.
- Schübel, K., excretion of eucodal, A., 118.
- Schück, A., aluminium-rich alloys of the ternary system aluminium-tin-manganese, A., 439.
- Schüffner, R. See Schlossberger, H.
- Schüler, H., metabolism and enzymic character of bacteriophage, A., 665.
- See also Wiegell, E.
- Schüler, Herman, and Gollnow, H., glow discharge tube of high light intensity for spectroscopic investigation of traces of substances, A., 598.
- and Schmidt, T., nuclear moment of scandium (Sc^{45}), A., 2. Isotopes of samarium, A., 3. Nuclear moment of thulium (Tl^{169}), yttrium (Y^{89}), and rhodium (Rh^{103}), A., 137. Nuclear moment of holmium (Ho^{165}), A., 424. Deviations of atomic nuclei from spherical symmetry, A., 804. Cassiopium (lutecium) atomic nucleus and spherical symmetry, A., 1051. Glow discharge with liquid air cooling, A., 1292.
- Schueler, J. L., continuously coating metal members with metal; [galvanising iron wire], (P.), B., 910*.
- Schuelke, E. See Dennig, H.
- Schürch, O., and Wintstein, A., carcinogenic action of aromatic hydrocarbons, A., 1400.

- Schütte, E. See Ammon, R.
- Schuette, H. A., Garvin, T. M., and Schwoegler, E. J., abdominal fat of Western range horse, A., 233.
- See also Stout, A. W.
- Schütz, A. See under Schütz, G. A.
- Schütz, E., unpolarisable electrodes to carry action currents, A., 1552.
- Schütz, G. A., presses for producing solid carbon dioxide, (P.), B., 948.
- Schütz, W., intensity distribution and half-value width of neon lines. I., A., 907.
- Schillbäch, H., and Krämer, K., intensity distribution and half-value width of neon lines. II., A., 907.
- Schütze, H. See Guyer, A.
- Schützler, K. See Sonn, A.
- Schüz, E., hardness and chilling of alloyed case-hard cast iron, B., 358.
- Schuhecker, K., heat exchange of the rat in exogenous hyperthermia, A., 1269.
- Schubknecht, W. See Töpelmann, H.
- Schujkin, N. I., Balandin, A. A., and Dimov, F. T., activity of mixed catalysts in simultaneous dehydration of ethyl alcohol and aniline; catalytic preparation of ethylaniline, A., 742.
- Balandin, A. A., and Plotkin, Z. I., activity of mixed catalysts in simultaneous dehydration of ethyl alcohol and ammonia, A., 742.
- and Feder, E. A., catalytic dehydration of toluene by combined hydrogen, A., 334.
- See also Balandin, A. A., and Zelinski, N. D.
- Schukarev, A. N., Kasjan, N. S., and Tsigler, V. D., kinetics of polymorphic transformation of quartz, A., 939.
- Krivobabko, I. P., and Schukareva, L. A., isothermal diphenylmethane calorimeter, A., 57.
- and Tsigler, V. D., rapid determination of density of Dinas articles, B., 227.
- Schukareva, L. A. See Schukarev, A. N.
- Schulein, J., electrolytic treatment of zinc, B., 233.
- Schulek, E., α -naphthoflavone, a new indicator for bromatometry, A., 1215.
- and Floderer, I., gravimetric determination of ester derivatives of *p*-aminobenzoic acid, with special reference to anaesthetics and novocaine in presence of other substances, A., 1259.
- and Gervay, W., determination of hexamethylenetetramine, B., 984.
- Determination of urethane in presence of amidopyrine, theobromine, caffeine, barbituric acid, and carbamide derivatives, B., 1022.
- Schulenburg, W. See Du Pont de Nemours & Co., E. I.
- Schulepova, V. A. See Tananaev, N. A.
- Schnler, W., and Reindel, W., uric acid synthesis in the bird. III. Purine synthesis, A., 1153.
- and Wiedemann, A., adrenaline synthesis *in vitro* under physiological conditions, A., 1014.
- Schulerud, A., degree of acidity [of flour], B., 426.
- Schull, F. See Kreutz, W.
- Schuller, H., Matzner, E., and Kailich, A., rubber and similar threads, (P.), B., 776.
- Articles and threads of rubber, (P.), B., 817.
- Schulman, J. H., and Hughes, A. H., monolayers of proteolytic enzymes and proteins. III. Enzyme reactions and penetration of protein monolayers, A., 785.
- Schulman, V. M. See Grünberg, A. A., and Riabtschikov, D. I.
- Schuloff, R., [dis]azo-dyes suitable for dyeing leather, (P.), B., 717.
- Schulpekova, A. See Reformatski, S.
- Schulte, F., choice of fuels in powdered-coal machines, B., 534.
- See also Meyer, O.
- Schulte, W. See Micheel, F., and Stackelberg, M. von.
- Schultes, H., and Neumann, K., manometer for measuring small pressure differences in gases and vapours at any initial pressure, A., 840.
- See also Frenzel, H.
- Schultes, W., and Nübel, R., temperature correction in determinations of calorific value, B., 178.
- Schultz, A. See Buhrig, W. H.
- Schultz, A. (Kiel), occurrence of iron in milk glands of rat and mouse, A., 234.
- Schultz, F. See Kraut, H.
- Schultz, H. W., Seegers, W. H., and Mattill, H. A., effect of heat and alcohol extraction on nutritive value of casein, A., 1404.
- Schultz, J. See Feist, K.
- Schultz, O., unit of vitamin-D, A., 129.
- Schultz, P. See Kaufmann, H. P.
- Schultz, V. N. See Juschkevitch, N. F.
- Schultze, G. R., active hydrogen, A., 810.
- Schultze, K., influence of evaporation on the migration of salts, A., 820.
- Determination of surface-active impurities in water, B., 288.
- Schultzer, P., resistance of capillaries. II. Fall of capillary resistance in patients on gastro-intestinal diets, particularly ulcer diet, and its behaviour with vitamin-C. III. Improbability of avitaminosis-C as the aetiological factor in gastric ulcer, A., 1011.
- Mortality of adrenalectomised young rats, with improved technique of operation, and after a period of treatment with cortical hormone, A., 1421.
- Schulwas, M. D. See Gutman, S. M.
- Schulwas-Sorokin, R. D., and Posnov, M. V., time of relaxation in crystals of Rochelle salt, A., 288.
- Schulz, E. H. See Kayser, H., and Püngel, W.
- Schulz, F. N., and Becker, M., does glycogen occur often in urine? A., 106.
- Carbohydrates of the albuminous gland of *Rana esculenta*, A., 1523.
- Schulz, G. See Thiel, A.
- Schulz, H. See Menzel, H.
- Schulz, H. I., cellulose lacquers, B., 465.
- See also Transparent Paper, Ltd.
- Schulz, J. A. See Cannon, C. Y.
- Schulz, K. G., anthocyanin discolorations in brewing barleys, B., 424.
- and Kunisch, G., protein content of barleys at different stages of maturity, A., 268.
- Determination of water and protein in brewing barley, B., 1015, 1112.
- Schulz, L. See Schmidt, Harry.
- Schulz, P. See Fuchtbauer, C.
- Schulz, W. See Meyerhof, O.
- Schulz, Waller. See Rathgeber, F.
- Schulze, A., allotropy investigations with very pure calcium, A., 1452.
- M.p. of chromium-iron resistance alloys, B., 499.
- Schulze, A. See also Hoffmann, F., and Steinwehr, H. von.
- Schulze, B. See Liebermann, H.
- Schulze, Bruno, contributions to paper microscopy from the Government Material testing office, Dahlem, Berlin, B., 588.
- Testing paper for bacterial permeability, B., 720.
- Corrosion of type metal by beech wood, B., 770.
- Schulze, F. See Haskins, J. F.
- Schulze, G. E. R., crystal form and space-group of ZrF_4 and HfF_4 , A., 285.
- Crystal structure of ergosterol and cholesterol derivatives, A., 434.
- Boron arsenate, A., 833.
- See also Hauptmann, H.
- Schulze, H., most probable ionisation curve of single Po α -particles and the occurrence of large numbers of ions at the end of the range, A., 275.
- Differential ionisation of single polonium α -rays in air and scattering of their range, A., 677.
- Schulze, J. E., McArdle, T. E., and Red River Refining Co., Inc., distilling apparatus, (P.), B., 579.
- Schulze, K., evaluation of pepsin by the coagulation method, A., 660.
- Schulze, R. See Reinhold, F.
- Schulze, Rudolf, photo-electric effect. I. External photo-electric effect of elements in the periodic table, A., 4.
- Schulze, W. See Scheele, W.
- Schulze, W. A., Frey, F. E., and Phillips Petroleum Co., reducing discoloration of motor fuels, (P.), B., 181.
- Purification and sweetening of hydrocarbon oils, (P.), B., 344.
- Purification and sweetening of hydrocarbons by copper halides, (P.), B., 344.
- Treatment of [hydrocarbon] oils with an alkaline sulphide, (P.), B., 937.
- Schulze, W. M. H., influence of electro-technic embedment materials on conductivity of soft rubber, B., 113.
- Schumacher, E. E., and Ferguson, L., utilisation of electrical resistance measurements for controlling the composition of alloys, with special reference to determination of antimony in lead, B., 808.
- and Phipps, G. S., physical and metallurgical properties of lead-calcium alloys for storage-cell grids and plates, B., 1001.
- See also Ellis, W. C.
- Schumacher, H. J., thermal decomposition of ozone, A., 1080.
- and Sundhoff, D., photochemical formation of carbonyl chloride from chloroform, chlorine, and oxygen, and its inhibition by added substances, A., 1211.
- See also Bodenstein, M., Brenschede, W., Hettner, G., and Sundhoff, D.
- Schumacher, H. M., composition of the milk of an anthropoid ape, A., 379.
- Schumacher, W. See Muraour, H.
- Schuman, L., distillation of coke-oven tar, B., 660.
- and Pisapia, E. A., behaviour of high-early-strength cement concretes and mortars under various temperatures and humidity conditions, B., 852.
- Schumann, G. See Rabinerson, A.
- Schumb, W. C., and Hamblet, C. H., reactions of thionyl chloride and of its thermal decomposition products with oxalates and formates, A., 460.

- Schumb, W. C., and Hartford, W. H., condensation reactions of boric acid, A., 166. Boron arsenate, A., 180.
- and Sweetser, S. B., equilibrium of the reaction between ferric ion and silver, A., 824.
- See also Simpson, S. G.
- Schundler & Co., Inc., F. E. See Denning, P. S.
- Schupfer, F., effect of p_H on lumen of capillaries, A., 530. Effect of calcium and potassium ions on lumen of capillaries, A., 530.
- Schur, H., Löw, A., and Kréma, A., effect of insulin on the immediate deposition of absorbed carbohydrate and fat in the organism, A., 538.
- Schur, M. O., and Brown Co., artificial leather, (P.), B., 185, 669, 1090. Vulcanised rubber products, (P.), B., 370. Conditioning of viscose solutions for impregnation, etc., (P.), B., 720. [Rubber] latex composition and its preparation, (P.), B., 862. Water-laid fibrous webs, (P.), B., 944. Washing of nitrocellulose, etc., (P.), B., 944. Absorbent water-laid webs of felted fibre, (P.), B., 1089. Viscose products, (P.), B., 1089.
- Hearn, W. L., and Brown Co., water-laid felts and impregnated products prepared therefrom, (P.), B., 351. Bituminised felt, (P.), B., 351.
- Hoos, B. G., and Brown Co., pulverised cellulose, (P.), B., 351. Mercerisation and purification of cellulose fibre, (P.), B., 450.
- See also Richter, G. A.
- Schure, P. S. J., destructive action of substances dissolved from glass on single-cell cultures, A., 409.
- Schurmann, R., precision absorption measurements with prism mirror spectrometers and thermo-elements, A., 561.
- Schurz, E., dry spinning of cuprammonium rayon, B., 488. Cuprammonium rayon, B., 623.
- Schuster, C. See I. G. Farbenind.
- Schuster, Ch. See Geller, F. C.
- Schuster, F., determination of flame velocities of mixtures of inflammable gases, B., 53, 258. Drying of gases, B., 337.
- Panning, G., and Bülow, H., modified Orsat apparatus for complete gas analysis, B., 881. Methane formation in gas mixtures containing carbon monoxide and dioxide in contact with various nickel catalysts, B., 1124.
- Schuster, G., action of Nessler's reagent on ketonic alcohols and acids, A., 370.
- See also Bougault, J.
- Schuster, K. See Wiberg, E.
- Schuster, L. W., bend test, and its value as a guide to ductility [of steel], B., 549, 1121.
- Schuster, M., gravimetric determination of acid [radicals] in dyed chrome-[tanned] leather, B., 601.
- Schuster, M. J. See Solun, A. S.
- Schut, W., formol number as a means of assessing fruit juices, fruit-lemonade syrups, jams, and wines, B., 747.
- Schutt, H. C. See Cooke, M. B., and Wallis, J. S.
- Schutte, A. E., and Lane Construction Corp., [aqueous] dispersion of asphalt, (P.), B., 135.
- Schutte & Koerting Co. See Ketterer, S. G.
- Schüttler, C. H., heat-insulating material, (P.), B., 531.
- Schutz, W., effect of seed dips on germination and growth of wheat, B., 165.
- Schutz, W. J. See Soskin, S.
- Schvemberger, N. A., silurian petroleum in Central Asia, A., 1348.
- See also Simakov, S. N.
- Schvuindenkov, V. G. See Schestakov, A. G.
- Schwab, G. M., atomic bromine, A., 432. Adsorption of ethylene on active centres of nickel, A., 441.
- See also Wagner, Gustav.
- Schwabe, E. L. See Emery, F. E.
- Schwabe, K., glass electrode for p_H measurements, A., 1341.
- See also Müller, Erich.
- Schwaer, L., polarographic studies with the dropping mercury cathode. LI. Electro-reduction of unsaturated acids, A., 1205.
- and Suchý, K., polarographic studies with the dropping mercury cathode. XLV. Electro-reduction of selenites and tellurites, A., 456.
- Schwake, F., microscopical study of copper ore from Nieder-Marsberg, Westphalia, A., 1220.
- Schwalbe, C. G., and Ender, W., steam treatment of beechwood, B., 548.
- and Neumann, K. E., carbonisation of low-grade and waste wood, B., 580.
- and Wenzl, H., evolution of rapid or concentrated bleaching processes, B., 945.
- Schwalbe, W., Schnecko, O., and Kalle & Co. A.-G., regenerated cellulose structures, (P.), B., 143.
- Schwalenstöcker, H. See Staudinger, H.
- Schwald, H. See Minouchi, T.
- Schwamberger, E. See Standard-I. G. Co.
- Schwan, W. See Fischer, Hellmut.
- Schwaneberg, H. See Strack, E.
- Schwareman, A., and Spencer Kellogg & Sons, polymerised and oxidised oils, (P.), B., 276. Blown oils, (P.), B., 276. Composite air-blown oils, (P.), B., 276.
- Schwartz, A., Israël, L., and Jacob, A., mode of action of commercial preparations of histidine, A., 1532.
- Schwartz, F. F., varnishes, (P.), B., 511.
- Schwartz, G. L. See Du Pont de Nemours & Co., E. I.
- Schwartz, G. M., relations of chalcocitostromeyerite-argentite, A., 602. Silicification of shale in the Mogul mine, A., 1344.
- Schwartz, H. A., metastability of cementite, B., 633.
- and Junge, C. H., metallography of ferrite in malleable cast iron, B., 1046.
- See also Schowalter, H. E.
- Schwartz, K., transport number and valency of silver in silver amalgam, A., 1462.
- Schwartz, R. See Hamilton, B.
- Schwartz, S. C. See McNabb, P. E.
- Schwartz, W., biology of food conservation, B., 1116.
- and Kretzdorn, H., influence of saponin and other poisons on yeast, A., 1418.
- Schwartzman, M. B., and Soltz, L. M., determination of salol in oils, B., 829.
- Schwarz, E. R., and Hoote, G. H., determination of [cotton] fibre maturity by polarised light, B., 843.
- Schwarz, F. See Lottermoser, A.
- Schwarz, H., action of adrenaline on serum-potassium, A., 539.
- Schwarz, Käte, blood-sugar of the snail (*Helix pomatia*, L.), A., 373.
- Schwarz, Karl, micro-shaking apparatus and stirrer for micro-titrations, A., 1098. Simple micro-burette without stopcocks, A., 1476.
- Schwarz, L. See Reichstein, T., and Reiss, M.
- Schwarz, M. von, and Krause, J., magnetic detection of flaws in ferromagnetic materials, B., 905.
- Schwarz, R. (Königberg), and Achenbach, H., nitrogen peroxide, NO₂, A., 457.
- and Heinrich, F., unsaturated silicon hydride, A., 311. Peroxide compounds, A., 1213.
- and Striebig, H., ammonium compounds of bismuth halides, A., 1213. Reaction between chlorine monoxide and ammonia, A., 1334.
- and Trageser, G., artificial transformation of feldspars into pyrophyllite, A., 1101.
- Schwarz, R. (New York), brewing processes, B., 1015.
- Schwarzacher, W. See Hoffmann, R.
- Schwarzenbach, G., concept of normal acidity potential, A., 450.
- and Egli, H., [electrostatic factors affecting acidity and chemical reactivity], A., 308.
- Schwarzkopf, H. E. See Strecker, W.
- Schwarzkopf, O., influence of catalysts on the reaction of sulphur with unsaturated organic compounds. I. Vulcanisation at high temperatures, A., 488.
- Schwarzkopf, P. See N. V. Molybdenum Co.
- Schwarzmann, H. See Terres, E.
- Schweckendiek, O. E. See Bergwitz, K.
- Schwedler, G., and Schweitzer, H., fire-proofing agents [for wood, etc.], (P.), B., 951.
- Schwedler, H. See Hein, F.
- Schwegler, A., secondary effects of primary cosmic rays, A., 1297.
- Schwéglér, (Mlle.) R. See Déjardin, G.
- Schweikert, E. See Meunier, E.
- Schweikert, G., equation of state. I., A., 157.
- Schweitzer, H., casein paints (casein-ammonia emulsions), B., 464. Iron gallotannate inks, B., 959.
- See also Schwedler, G.
- Schweitzer, W. K. See Grasselli Chem. Co.
- Schweizer, E., and Landolt, C., crêpe yarn, (P.), B., 1137.
- Schweizer, R. See Lieser, T.
- Schwenzer, K. See Pfeiffer, P.
- Schwi edessen, H., principles, development, and examples of technical firing calculations. I. Construction of formulae from material balance. II. Examples and summarised formulae. III. Formulae for calculating heat developed by combustion gases in a furnace, B., 209, 289, 833.
- Schwier, W., furnaces for heat treatment of iron and steel, (P.), B., 810.
- Schwiete, H. E., effect of water and aqueous solutions on hydration and heat effect during setting of ground cement clinker, B., 497.
- and Gronow, H. E. von, specific heat of raw [cement] mixes, B., 1096.
- and Strassen, H. zur, combination of magnesia in Portland cement, B., 23. Influence of magnesia in Portland cement clinker on the tetracalcium aluminate ferrite; the system CaO-MgO-Al₂O₃-Fe₂O₃, B., 547.
- See also Pranschke, A.

- Schwietzer, A., construction and working of potato flake factories, B., 870.
- Schwinger, J. See Motz, L.
- Schwinn, R., distribution of arsenic in relation to rock structure in the Eastern Alps, A., 61.
- Schwinn, W., and Dögerloh, E., endurance limit of cold-drawn copper and pure aluminium wires under vibrational stresses, B., 499.
- Schwob, C. R., and Cerecedo, L. R., oxidation of uracil *in vitro*, A., 358.
- Schwoegler, E. J. See Schuette, H. A.
- Schwoerer, R. C. See Braun, G.
- Sciounoff, F. See Martin, Eric.
- Sciullo, M. A. See Noll, R. N.
- Seehy. See Gantois.
- Scorah, L. V. D. See Triplex Safety Glass Co.
- Scorah, R. L., thermodynamic theory of detonation, A., 1206.
- Scorpati, G., action of intravenously-administered lecithin in pulmonary tuberculosis, A., 386.
- Scortecci, A., internal fissures in steels, B., 1145.
- Scott, A. E. See Davies, J. G.
- Scott, A. F., glass-blowers' holder for large flasks, A., 321.
- and Bridger, G. L., apparent volumes and apparent compressibilities of solutes in solution. II. Concentrated solutions of lithium chloride and bromide, A., 1456.
- Odenhaus, V. M., and Wilson, R. W., compressibility coefficients of solutions of alkali halides, A., 31.
- and Wilson, R. W., apparent volume of salts in solution and their compressibilities, A., 31.
- Scott, Aleita H., thyroxine and tissue metabolism, A., 1171.
- Scott, Arnold H., specific volume, compressibility, and volume thermal expansivity of rubber-sulphur compounds, B., 775. Effect of pressure on the dielectric constant, power factor, and conductivity of rubber-sulphur compounds, B., 915.
- Scott, C. E. See Hixson, A. W.
- Scott, C. W., tests in Rangoon River on damage by marine borers to various woods, including Burma teak and British Guiana greenheart, creosoted and untreated, B., 102.
- Scott, D. A., and Fisher, A. M., crystalline insulin, A., 788.
- See also Charles, A. F., and Fisher, A. M.
- Scott, D. C., sewage-treatment apparatus, (P.), B., 608.
- Scott, E., Erf, L. A., and Delor, C. J., influence of the food of the cow on nutritional value of the milk, A., 1398.
- Scott, E. W., and Henne, A. L., titration of fluorine in biological materials, A., 1552.
- See also Machle, W.
- Scott, F. A., energy spectrum of the β -rays of radium-E, A., 1295.
- Scott, F. H. See Bellis, C. J., and Lehman, W.
- Scott, G. H., barytes recovery from [oil field drilling] muds, B., 391.
- Scott, Gordon H. See Williams, P. S.
- Scott, G. S. See Keene, W. L.
- Scott, H., quenching of steel cylinders, B., 151. Factors determining impact-resistance of hardened carbon steels, B., 676.
- See also Westinghouse Electric & Manufg. Co.
- Scott, H. M., and Hughes, J. S., turkey nutrition investigations, A., 391.
- Scott, J. R., oil-resisting rubber. IV. Effect of ageing on swelling, B., 279. Nomenclature of carbon pigments, B., 465. Anti-oxidants. I. Tests in a rubber-sulphur mixing, B., 563. Theory and application of the parallel-plate plastimeter [for rubber]. II, B., 685. Rationalisation of hardness-testing of rubber, B., 1058.
- and Webster, D. M., oil-resisting rubber. V. Rubber containing inorganic compounding ingredients, B., 1154.
- Scott, J. Winson. See Dempster, Ltd., R. & J.
- Scott, James W. See Western Electric Co.
- Scott, K. J. L. See Maile, W. C. D.
- Scott, L. C. See Craig, C. F.
- Scott, L. D., determination of fructose in blood, A., 770.
- Scott, L. H., treatment of sewage at Oklahoma City with iron, chlorine, and lime, B., 927.
- Scott, N. D. See Du Pont de Nemours & Co., E. I.
- Scott, R. B. See Brickwedde, F. G., and Silsbee, F. B.
- Scott, R. D., determination of residual chlorine [in water], B., 1024.
- Scott, R. S. See McKee, J. A.
- Scott, W., refractory linings for rotary melting furnaces, (P.), B., 993.
- Scott, Walter, effects of gas liquor on sewage-purification processes, B., 47.
- Scott, Winfield, Byers, H. G., and Rubber Service Labs. Co., age-resisting rubber compound, (P.), B., 280.
- and Kavalco Products, Inc., [triaryl] phosphates, (P.), B., 263.
- and Rubber Service Labs. Co., age-resisting vulcanised rubber compound, (P.), B., 280.
- Scott, W. J. See Brit. Thomson-Houston Co., and Western Elec. Co.
- Scott & Co., Ltd., E., and MacGregor, J., treatment [drying] of fish offal, (P.), B., 477.
- Scott & Son, London, Ltd., G. See Spence & Sons, Ltd., P.
- Scottish Gas Utilities Corporation, Ltd., O'Brien, A. M., and Hindmarch, E., production of oils of low b.p. and low-viscosity fuel oil by heat treatment of tars and oils, (P.), B., 712.
- Scouler, F. See Daniels, A. L.
- Scouler, W. D., and Nixon, J., solution of oxygen from air bubbles, B., 752.
- and Watson, W., solution of oxygen from air bubbles, B., 47.
- Seavill Manufacturing Co. See Price, W. B.
- Seawen, E. F. See Spence, A. W.
- Seoz, G., action of thyroxine on weight of the internal organs in the rat, A., 540. Action of thyroxine on pancreatic amylase, lipase, and trypsin, A., 540. Action of diuresis and thyroxine on protein metabolism, A., 1171.
- and Marangoni, P. L., action of thyroxine on dog's plasmaphosphatase power, A., 540. Action of thyroxine on rat's bone-phosphatase, A., 540.
- Seozari, G. See Zummo, C.
- Screen Advertising, Inc. See Pistocco, V. L.
- Scribner, B. F. See Hoffman, J. I., and Meggers, W. F.
- Scribner, C. F., acid-proof stain [for wood], B., 684.
- Scripture, E. W., jun., and Master Builders Co., protecting and colouring concrete, (P.), B., 102. Colouring concrete, (P.), B., 903.
- Scrivener, F. L. G., degree of saturation with bases of some New Zealand soils, B., 687.
- Scriven, W. de M., and Bryan, A. H., calcium and phosphorus metabolism in a case of acromegaly showing marked osteoporosis, A., 1400.
- Scroggie, A. G. See Charch, W. H.
- Scudi, J. V., preparation of β -amino-acids, A., 1123.
- and Lindwall, H. G., condensation of benzoylformanilide with cyano-activated methylene compounds, A., 1365.
- Seabury, R. L., Murray, L. W., and Gen. Motors Corp., brake-lining composition, (P.), B., 533.
- Seailles, J. C., production of a mixture of alumina and an insoluble calcium salt and of alumina, (P.), B., 355. Treatment of lime [calcium] aluminates, (P.), B., 899.
- Sealock, R. R., and Du Vigneaud, V., reduction of pitressin and pitocin with cysteine, A., 1275.
- Sealth Corporation. See Finlayson, A.
- Seaman, W. H., chilled [iron] roll, (P.), B., 314. Metal roll, (P.), B., 314.
- Seaman Paper Co., coated paper, (P.), B., 18. Coating of paper, (P.), B., 352.
- See also Nash, W. C.
- Seamless Metals, Ltd., and Rice, C., electrolytic deposition of metals [as seamless endless bands], (P.), B., 1000.
- Searle, O. M. See Michaels, J. J.
- Searls, E. M., and Snyder, F. M., control of ectoparasites of laboratory rats by atomised pyrethrum extracts in oil, A., 1411.
- Sears, G. W., and Lohse, F., reaction tungstic oxide-carbon-chlorine, A., 834.
- Sease, V. B. See Du Pont de Nemours & Co., E. I.
- Seavey, F. R., Phillips, A. J., Olsen, F., and Cellulose Res. Corp., bleaching of cellulose, (P.), B., 847.
- See also Tibbitts, G. C.
- Seavoy, G. E. See Crahan, P. F.
- Sebelin, M. See Hesse, E.
- Seberger, M. V. See Morgan, A. F.
- Sebor, J., electrolytic determination of cadmium, A., 186.
- Seborg, R. M. See Stamm, A. J.
- Sebrell, L. B., and Wingfoot Corp., derivatives of mercaptoarylthiazoles, (P.), B., 264.
- Sebrell, W. H. See Dean, H. T.
- Secareanu, S., micro-furnace and a micro-press for tablets, A., 465.
- and Lupas, I., Schiff's bases of 2:4:6-trinitro- and 2:4-dinitro-benzaldehyde, A., 502.
- See also Nitzescu, I. I.
- Seek, W., evaluation of textile starch, B., 603. Reactions between textile fabric and detergent during the washing process, B., 765.
- Secker, J., humoral control of secretion by submaxillary gland of the cat following sympathetic stimulation, A., 116.
- Sédallian, P., and Clavel, J., recovery of agglutinins according to the proportion of antibodies fixed on bacteria, A., 665.
- See also Mouriquand, G.
- Sedgwick, H. J. See Day, C. D. M.

- Sedletzki, J., and Brunovski, B., structure of humic acid and its relation to lignin and coal, A., 1451.
- Sedohara, T. See Kamei, S.
- Sedov, J. S., and Filippov, A. N., optical dissociation of InBr and InI, A., 280.
- Sedwich, A., action of commonly occurring organisms on fats, B., 858.
- Seebach, F., and Bakelite Ges.m.b.H., conversion of resitols and resites into oil-soluble products, (P.), B., 684. Combination of hardenable phenol-aldehyde condensation products and air-drying oils, (P.), B., 1153.
- Seebaum, H., and Hartmann, E., determination of nitric oxide in coke-oven gas, B., 341. New methods and apparatus for supervision of gas quality, B., 1080.
- Seeber, C. H. See Unger, L.
- Seeder, W. A. See Gorter, E.
- Seefisch, H. See Meythaler, F.
- Seegal, D., Heidelberger, M., and Jost, E. L., formation of precipitin for the group A specific carbohydrate of *Streptococcus hemolyticus* in rabbits injected intravenously and subcutaneously, A., 1168.
- Seegers, H., heat-conservation during liquor recovery in the cellulose industry, B., 400.
- Seegers, W. H., and Mattill, H. A., effect of heat and hot alcohol on liver-proteins, A., 1266.
- See also Schultz, H. W., and Smith, H. Gregg.
- Seekles, L., and Sjollema, B., etiology of grass tetany. V. Reduction of blood-calcium and -magnesium by a plant substance and by withdrawal of blood, fasting, and tissue necrosis, A., 1270.
- Seel, P. C. See Eastman Kodak Co.
- Seelemann & Söhne, G. A., concrete or mortar mixers, etc., (P.), B., 1096.
- Seelich, F., abnormal surface tensions of dilute aqueous phenol solutions, A., 819.
- Seeliger, R., and Sommermeyer, K., cathode sputtering, A., 572.
- Seelkopf, K., and Taeger, H., determination of small amounts of lead, A., 950. See also Grabe, F.
- Seem, W. P., and Andrew, T., influence of twist on shade and dullness of silk hosiery yarn, B., 665.
- Seemann, H. J., conditions and limits of correct electron projection of images; electron paths in cylindrical electrical field of a coarse crystalline glowing wire, A., 18. Electrical conductivity of mixed metallic phases at low temperatures, (Cu-Pt alloys), A., 923. Criterion for ordered atomic distributions in series of metallic mixed crystals, A., 1199.
- See also Auer, H.
- Seemann, W. See Remy, H.
- Seerak, I. J. See Stender, W. W.
- Seever, M. H., De Fazio, S. F., and Evans, S. M., comparison of cyclopropane and ethylene with reference to body saturation and desaturation, A., 525.
- Sétérian, D., pick-up of phosphorus from impure acetylene in the welding of steels, B., 594.
- See also Portevin, A.
- Seferovitch, J. E., preparation of anhydrous aluminium chloride by catalytic chlorination of kaolin, B., 99.
- Segal, B., reaction of magnesium chloride in solution on pyrite, B., 225. Technical applications of fuller's earth gel. I. In the glucose industry. II. Treatment of molasses fermentation liquors, B., 283. Fishy flavour in butter, B., 1019.
- Segal, M. See Canzanelli, A.
- "Segeci" (Société Générale d'Exploitation Commerciale & Industriel), polishing substances [wax powders], (P.), B., 238.
- Segesser, A. von. See Karrer, P.
- Segnitz, P. H., and Shaler Co., combustion and heat-transferring unit, (P.), B., 83.
- Segrè, E., quadratic Zeeman effect in the principal series of sodium, A., 424. See also Amaldi, E., and Dunning, J. R.
- Segura, M. See Kelly, T. L.
- Seguy, J. D. See Universal Oil Products Co.
- Sehestedt, H. See Kestner, O.
- Sehgal, B. S. See McKay, C. M.
- Sehl, F. W. See Ross, H. L.
- Sehra, K. B. See Ratnagirisharan, A. N.
- Seiberlich, J. See Weingand, R.
- Seiberling Latex Products Co., rubber or rubber articles having roughened or crinkled surfaces, (P.), B., 1006.
- Seibert, F. B., Aronson, J. D., Reichel, J., Clark, L. T., and Long, E. R., purified protein derivative, a standardised tuberculin for uniformity in diagnosis and epidemiology, A., 889.
- Seibert, H. See Weitz, E.
- Seibt, G., apparatus for producing high ohmic resistances, etc., (P.), B., 415.
- Seidel, F., Thier, W., Uber, A., and Dittmer, J., formation of "triacylacetate ester." II, A., 1508.
- Seidel, H. See Reinhold, H.
- Seidel, L. See Hiltner, W.
- Seidl, F. [with Fröhlich, H., and Hofer, E.], action of radium and X-rays on piezo-quartz, A., 288.
- Seif, L. D., and Rider, T. H., air-lift extractor applied to analysis of alkaloidal drug extracts, B., 653.
- Seifert, K. See König, W.
- Seifert, K. M., and Griffith Labs., salt mixtures [for preserving hides], (P.), B., 305.
- Seifert, R. See Rojahn, C. A.
- Seifried, O., and Heidegger, E., vitamin-D injury in fowls, A., 903.
- Seigle, J., iron-cementite eutectoid diagram, A., 291. Eutectoid iron-cementite diagram, A., 693. Structures in transition zone between quenched and non-quenched parts of 0.22% carbon steel, B., 103.
- Seigle, W. R., and Johns-Manville Corp., treated fibrous material, (P.), B., 896.
- Seigneurin, R. See Cristol, P., and Lisbonne, M.
- Seijo, E. See Calvet, F.
- Seil, G. E., granular material for gas purification, (P.), B., 665*, 1084*.
- and Lavino & Co., E. J., granular material for gas purification, (P.), B., 758.
- Seiler, M. See Halban, H. von.
- Seiter, F. See Elbel, E.
- Seith, W., and Etzold, H., mobility of gold in solid lead, A., 158.
- and Kubaschewski, O., electrolytic transport of carbon in solid steel, A., 1205.
- Seitz, E. O. See Krefft, H.
- Seitz, F., theoretical constitution of metallic lithium, A., 560.
- See also Barnes, R. B.
- Seitz, G. See Hausser, K. W.
- Seiwell, H. R., phosphate in western basin of the North Atlantic, A., 1219.
- Seka, R. See Kohlrausch, K. W. F.
- Sekera, F., manuring of soils in dry climates. I, B., 515.
- Sekera, F., and Schober, K., microfertilisation method for determining [soil] requirements of phosphoric acid and potassium, B., 72.
- See also Janke, A.
- Seki, T., siallitic and allitic soils, B., 964.
- Sekiguchi, H. See Endô, Hikojo, and Ueno, Shigizo.
- Sekikawa, K., relationship of the pancreas to hydrolysis of nitrogenous substances in faeces; relationship of disease of the pancreas to hydrolysable carbohydrates in faeces, A., 513.
- Sekiya, J. See Kaya, S.
- Sekla, B., Pelnar, P., and Horak, O., reduction of volume of red corpuscles under influence of fat solvents and protective action of calciummimetic anions, A., 507.
- Sekuracki, F. See Wierzuchowski, M.
- Selajev, I. A. See Vesselovski, V. S.
- Selby, W. M. See Gilman, H.
- Selden Co., Fiedler, P. P., and Jaeger, A. O., [catalyst for] contact sulphuric acid process, (P.), B., 226.
- and Jaeger, A. O., monocarboxylic acids and their derivatives, (P.), B., 140, 219, 443. [Coating for] candle, (P.), B., 277. Monocarboxylic acids and derivatives [aldehydes], (P.), B., 297. Sulphonated condensation products of carbohydrates with hydrocarbons and aldehydes; [tanning agents], (P.), B., 348. Coloured cellulosic compositions, (P.), B., 353. Monocarboxylic acids, (P.), B., 397. Purification of by-product ammonia, (P.), B., 494. Effecting [exothermic] catalytic reactions, (P.), B., 609.
- and Koetz, J. L., [vanadium zeolite] catalysts [for oxidation of sulphur dioxide], (P.), B., 187.
- Selden Research & Engineering Corporation, and Jaeger, A. O., purification of phthalic anhydride, (P.), B., 140.
- Jaeger, A. O., and Daniels, L. C., phthalimide, (P.), B., 443, 621.
- Selidshiev, G. N. See Tarasov, B. K.
- Selmer, B. C. J., attachment for mills for grinding paint, printing inks, and similar substances, (P.), B., 481.
- Seligman, A. M. See Fieser, L. F.
- Seligman, R., Goodman, H. F., and Crosby, W. E., plate heat exchangers for fluids, (P.), B., 657. Heat-exchange apparatus for fluids and elements or plates therefor, (P.), B., 657.
- Seligmann, A., apparatus for producing solid carbon dioxide, (P.), B., 544.
- Selinov, I. See Kurtschatov, I. V.
- Selinov, J., periodic system of the stable isotopes and relation of the mass and charge of the nuclei, A., 1185.
- Seliski, I. P., dilatometric study of decomposition of austenite at constant temperature, B., 271.
- See also Tschernishev, V. V.
- Seliski, L., elimination of corrosive substances from cracked gasoline, B., 1031.
- Selivanov, B. P. See Ginzberg, A. S.
- Selivanov, F. F., variability of concentration of natural waters of European Russia, A., 1099.
- Seljakov, N., property of structure analysis, A., 150.
- and Sovs, E., X-ray study of recovery and recrystallisation of aluminium single crystals, A., 812. "Recovery" of metals and recrystallisation phenomena in aluminium single crystals, A., 923.
- See also Kries, B.

- Seljakov, S. N. See Kovda, V. A.
- Sell, H. M., and Kremers, R. B., metallic salts of ursolic acid, A., 624.
- Olsen, A. G., and Kremers, R. E., lecitho-protein; emulsifying ingredient in egg yolk, B., 1162.
- Selle, W. A., Westra, J. J., and Johnson, J. B., attempts to reduce symptoms of experimental diabetes by irradiation of the pituitary, A., 1148.
- Sellei, C. See Jány, J.
- Sellei, J., growth-stimulating and -inhibiting action of dyes on plants, A., 905.
- Sellschopp, W., thermal conductivity of carbon dioxide near its critical point, A., 574.
- Selman, I. W., translocation in seedling tomato plants, A., 549. Water relationships of tomato plants, A., 1037. See also Bolas, B. D.
- Selous, C. F., and Perryman, P. W., surface tension of urine during the menstrual cycle, A., 385.
- Seltz, H., thermodynamics of solid solutions. II. Deviations from Raoult's law, A., 583. Perfect ternary solid solutions, A., 1200.
- Seltzer, J. M., water-absorption capacity of leather; report of Committee [of the American Leather Chemists' Association], 1935, B., 1155.
- Selvaggi, G., pH of gastric juice in gastroduodenal ulceration, A., 1011.
- Selvey, E. H., colorimetric determination of free carbon in tar, B., 341.
- Selvig, W. A., and Ode, W. H., determination of gas, coke, and by-products of coal; evaluation of laboratory assay tests, B., 483. See also Fieldner, A. C.
- Selwood, P. W., magnetochemical properties of samarium, A., 14. Separation of rare-earths, A., 950.
- Taylor, H. S., Hipple, J. A., jun., and Bleakney, W., electrolytic concentration of oxygen isotopes, A., 711.
- Taylor, H. S., Lozier, W. W., and Bleakney, W., concentration of tritium (H^3), A., 711.
- Selye, H., Thomson, D. L., and Collip, J. B., metaplasia of uterine epithelium produced by chronic oestrin administration, A., 259. Effect of gonadotropic hormones during gestation and lactation, A., 791. Interrelations between water and fat metabolism in relation to disturbed liver function, A., 1273. Endocrine interrelations during pregnancy, A., 1402. Age factor in responsiveness to gonadotropic hormones, A., 1424. Effect of oestrin on ovaries and adrenals, A., 1425. See also Bachman, C., and Collip, J. B.
- Semb, J., heptane and its solutions. VI. Solubility of halogens in heptane, A., 1067. Phytochemical study of seed of the digger pine, B., 1054.
- Baumann, C. A., and Steenbock, H., fat-soluble vitamins. XII. Carotene and vitamin-A content of colostrum, A., 260. See also Gardner, J. H.
- Semenido, E., refining of lubricating oil distillates, B., 1032.
- Semenov, N., theory of degenerate explosions, A., 451. Theory of combustion. III, A., 451. Kinetics of exothermic reactions. I. Law of initial acceleration. II. Role of intermediate compounds in chain reactions. III. Role of the walls in chain reactions, A., 586, 937.
- Semenov, P. A. See Fedorov, B. P.
- Semenov, V. M., Schagalov, A. J., and Astrachantzev, P. I., preparation of oxalic acid from sodium formate, A., 961.
- Semenova, B. See Sandomirski, I.
- Sementschenko, V. K., solubility and surface tension, A., 1315.
- and Davidovskaja, E. A., superficial salting-out by electrolytes. I. Superficial salting-out and dielectric constant, A., 1317.
- and Gratscheva, A. F., superficial salting-out by electrolytes. II. Dependence on temperature, A., 1317.
- Semerano, G., action constant, heat capacity, and energy of activation in saponification of esters of *o*-phthalic, 3- and 4-nitro-*o*-phthalic acids, A., 828. Reduction of deoxybenzoin and of benzoin at the dropping Hg cathode, A., 937. Intensity of the diffusion current in relation to size and period of renewal of the cathode surface, A., 937.
- Semet-Solvay Co. See Conklin, E. B.
- Semet-Solvay Engineering Corporation. See Schrader, L. F., Steere, F. W., and Wingert, W. B.
- Semichatova, O. See Beresovskaja, F.
- Semichon, L., variations in glycogen and accompanying substance of active and hibernating snails, A., 232.
- Semizorov, See Lev.
- Semmens, E. S., bursting of cells by polarised sunlight, A., 132.
- Semon, W. L., and Goodrich Co., B. F., removal of primary aromatic amines from aqueous solutions, (P.), B., 621. Rubber composition and its preservation, (P.), B., 643, 817. sec-Aromatic amines; [rubber antioxidants], (P.), B., 962. Polymerisation of vinyl chloride, (P.), B., 1153. See also Brous, S. L., and Goodrich Co., B. F.
- Semproni, A. See Ciocca, B.
- Sen, B. See Chopra, R. N.
- Sen, B. N., diffusion of elements in the solid state, A., 24. Formation and stability of complex amines, A., 917. Parachor and entropy of metallic elements, A., 934.
- Sen, D. C., and Rây, P. R., compounds of dimethylglyoxime with cobaltous chloride, A., 476. See also Rây, P. R.
- Sen, H. D., and Gupta, G. N., dehydration of alcohol, B., 745.
- and Joshi, K. C., vinegar, glacial acetic acid, and allied products, B., 745.
- Joshi, K. C., and Gupta, G. N., assay of a few grades of Indian sugars, following methods adopted in the Java Proefstation, B., 743.
- Sen, H. K., and Das-Gupta, G. C., cellulose fermenters from horse dung, B., 372. See also Banerjee, S.
- Sen, M. K., and Gupta, A. K. S., investigations in the infra-red. I. Absorption spectrum and molecular structure of borates, A., 1189.
- Sen, R. N., and Banerji, B. N., azoaldehydes, A., 1239.
- Sen, S. See Ghosh, J. C.
- Sen-Gupta, P. K., fluorescent radiation from nitrous oxide, A., 12. Significance of molecular absorption spectra, A., 561. Photodissociation of nitrous oxide, A., 1331.
- Sen Gupta, P. N. See Raychaudhury, D. P.
- Senatori, (Signa.) V. See Berlingozzi, S.
- Senderens, J. B., catalytic decomposition of alkyl chlorides, A., 604. Catalytic decomposition of alkyl bromides, A., 1103.
- Sendrail, M., Molinier, R., and Aversenq, J., blood-sugar modifications in hyperthermal and radioactive media, A., 247.
- Senft, A., gas masks, (P.), B., 480.
- Senfter, E., regulation of heat development and distribution in annealing and heating furnaces with divided air supplies, B., 676. Refractory insulating bricks in construction of modern steel-annealing furnaces, B., 727.
- Senftleben, H., change of thermal conductivity of non-polar gases, of liquids and solids owing to an electric field, A., 692.
- and Hein, W., collision phenomena in recombination of hydrogen atoms to molecules, A., 150, 283.
- and Pietzner, J., effect of a magnetic field on passage of heat through gases, A., 156.
- Senftner, V. See Hahn, O., Traube, W., and Werner, O.
- Senger, A. I. See Lopatto, E. K.
- Sengoku, S., alkaline treatment of cotton at low temperature, B., 401. [Preparation of] cold water-soluble starch, B., 424.
- Senin, A. V., rôle of selenium and arsenious oxide in decolorisation of glass, B., 404.
- Senior, J. K., evaluation of structural theory of organic chemistry. I. and II., A., 1305, 1479.
- Senkus, M., and Grubb, A. C., critical voltage for formation of ozone by alternating-current discharge, A., 1210.
- Senner, A. H., application of steam to sterilisation of soils, B., 198.
- Sennewald, K., and Birckenbach, L., mechanism and thermal effect of fulminic acid polymerisation, A., 1464.
- Sentry Co. See Crocker, P. B.
- Senturia, B. D., glutathione content of blood in chronic arthritis and rheumatoid conditions, A., 381.
- Sentzov, P. A., and Tschadaeva, L. F., treating cracked gasolines to prevent corrosion, B., 1031. See also Alexandrov, L. A.
- Sepalova, O. See Remesov, I.
- Serb-Serbin, P. V., Suchanova, N. G., and Sesin, N. S., protective action of paint coats against corrosion in sea- and fresh water, B., 464.
- Serb-Serbina, N. N. See Volkova, Z. V.
- Serber, R., energies of hydrocarbon molecules, A., 448.
- Serebrenikova, M. T. See Belopolski, A. P.
- Sereda, J. [with Macura, K., and Udrycki, A.], mineral oil sulphonic acids. V. Reactions with aromatic amines, B., 1081. See also Pilat, S. von.
- Serefis, S., bismuth poisoning, A., 398. Resorption of bismuth from the gastrointestinal canal, A., 657.
- Serfuss, E. J. See Theis, E. R.
- Serfaty, A., action of alkaloids on physiological polarity of infusoria, A., 245.
- Sergeev, A. P. See Scherlin, S. M.
- Sergeev, B. F., and Atamantschukov, G. D., commercial process for treating solidified pitch, B., 1029.
- Sergeev, E. A. See Stender, W. W.
- Sergeev, L., and Vittmann, F., residual stresses and corrosion cracks in metals, B., 361.
- Sergeev, L. I., salt-resistance of wheats, B., 697.

- Sergeev, *M. I.*, and Chernikhovski, *M. G.*, optical constants of the alkali metals, A., 684.
- Sergeeva, *M. G.* See Dshons, *V. N.*
- Sergienko, *S.* See Lebedev, *S.*
- Sergiyakaja, *S. I.*, Kropacheva, *A. A.*, and Lopovich, *I.*, preparation of β -diethylaminomethylbutanol, A., 849.
- Sergueev, *A. P.*, and Kochouchovski, *A. A.*, precipitation of copper and of silver by the action of the latter, A., 1212.
- Sergunin, *N. A.* See Komar, *N. P.*
- Sergutina, *M. M.* See Valiaschko, *N. A.*
- Seriani, *E.*, influence of insulin on alcoholæmia in men, A., 1285.
- Serini, *A.* See Schoeller, *W.*
- Sernagiotto de Casavecchia, *E.*, oxidation of sulphites, A., 939.
- Serra, *A.*, mineral waters of Abbarghente (Romana-Sassari), A., 468. Reactions in solid state at room temperature, A., 716.
- Serrano, *F. B.*, control of bacterial fruitlet rots of pineapple in the Philippines, B., 1110.
- Serrington, *W. B.*, and Charak Chem. Co., [water-repellent] fabric, (P.), B., 402.
- Serruys, *M.*, detonation and pseudodetonation in internal-combustion engines, B., 133.
- Sertic, *V.*, microbial agglutination and lysis of bacteriophage, A., 537.
- Servant, *R.* See Vaudet, *G.*
- Servantie, *L.*, and Baron, *A.*, determination of urinary phenols, particularly in *post-partum* and cancerous states, A., 648.
- and Demenier, *G.*, determination of blood-protein, A., 374.
- Servazzi, *O.* See Bifano, *M.*
- Servia, *A.*, α -methoxypentane- β -ol, A., 470.
- Service, *H.*, igneous rocks from the iron-producing district of Bilbao (Vizcaya), Spain, A., 1347.
- Service (Engineers), Ltd., and Johnson, *J. A.*, filter-presses, (P.), B., 481.
- Servigne, *M.*, cathodic phosphorescence phenomena, A., 915.
- See also Lacassagne, *A.*
- Seshacharyulu, *E. V.*, and Dutt, *S.*, synthetic alkaloids from narcotine, A., 995.
- Seshadri, *T. R.*, constitution of formic acid and formates, A., 730.
- See also Barger, *G.*, and Dey, *B. B.*
- Seshadriengar, *N. K.* See Guha, *P. C.*
- Seshan, *P. K.*, chemical studies on coal, B., 435.
- See also Krishnan, *K. S.*
- Sesin, *N. S.* See Serb-Serbin, *P. I.*
- Setaschwili, *I.* See Kandelaky, *B.*
- Seth, *J. B.*, spectrum of doubly-ionised iodine, A., 424. Regularity observed in the second spark spectrum of iodine, A., 800.
- Seth, *S. R.* See Gulati, *K. G.*
- Seto, *L.*, application of the high-tension electric discharge to the catalytic hydrogenation process. I., B., 559.
- Setter, *L. R.*, rapid determination of suspended solids in activated sludge by the centrifuge method, B., 431.
- and Mattson, *S.*, coagulation of soil suspensions by aluminium and iron salts; electrophoretic study, B., 281.
- Ridenour, *G. M.*, and Henderson, *C. N.*, cation-exchange capacity of activated [sewage] sludge, B., 1071.
- Seuderling, *Y.*, continuous oligodynamic action of elements on bacteria, A., 1421.
- Seusz, *A.* See Täufel, *K.*
- Sevag, *M. G.*, Cattaneo, *C.*, and Maiweg, *L.*, nature of polysaccharides of yeast, A., 1280.
- Sevellec, *E. C.*, furnaces, (P.), B., 1121.
- Severac, *M.* See Raiziss, *G. W.*
- Severin, *B. A.* See Braunstein, *A. E.*
- Severin, *H.* See Hückel, *W.*
- Severin, *S. E.*, electroanalysis as method of separation and determination of bases in biological fluids. I. Electroanalysis of aqueous solutions of carnosine, creatine, and creatinine, A., 370.
- See also Meschkova, *N. P.*
- Sevieri, *V.*, concrete from granular blast-furnace slag after exposure to sea-water for twenty-seven years, B., 547.
- Sevin, *E.*, waves, spin, and constants, A., 9. Levels of the neutron, A., 1049.
- Waves and spin, A., 1050.
- Seving, *F. W.*, Bergqvist, *A.*, and Olsson, *K. B.*, heat-insulating materials, (P.), B., 882.
- Seward, *R. P.*, activity coefficients of salts in ethylene dichloride from solubility measurements, A., 166.
- Sexton, *W. A.* See Imperial Chem. Industries.
- Seyd, *C.*, utilising strong bone glue for sizing rayon, B., 1140.
- Seyer, *W. F.*, and Inouye, *K.*, paraffin wax; tensile strength and density at various temperatures, B., 615.
- Seyewetz, *A.*, and Szymson, *S.*, influence of nature and proportion of alkali on reducing power of photographic developers, B., 254. Products of oxidation of photographic developers by silver bromide. II., B., 333.
- Seyhan, *M.* See Schiemann, *G.*
- Seyler, *H. W.* See Bircher, *J. R.*
- Seymour, *G. W.*, and Celanese Corp. of America, derivative of cellulose solvent and its employment, (P.), B., 367.
- Seymour, *M. W.* See Eastman Kodak Co.
- Sgarzi, *L.* See Mezzadrolì, *G.*, and Votoček, *E.*
- Sgroso, *J. A.*, delayed effects of denervation of the adrenal gland on adrenaline secretion, A., 1534.
- Shachovtzev, *I. N.* See Orlov, *N. A.*
- Shack, *J.*, effect of oxygenation and reduction on equilibrium of hæmocyanin with acids and bases, A., 770.
- Shafer, *E. G. E.* See Bird, *J. C.*
- Shaffer, *M.*, Chang, *T. H.*, and Gerard, *R. W.*, influence of electrolytes on respiration in nerve, A., 1405. Influence of blood-constituents on oxygen consumption in nerve, A., 1405.
- Shagceva, *A.* See Koperina, *A.*
- Shah, *M. S.*, Bhatt, *C. T.*, and Kanga, *D. D.*, *m*-toluidine-6-sulphonic acid, A., 206. Action of bromine on *p*-methoxysulphonic acids, A., 338. Methylation of sulpho- and nitro-derivatives of cresols and hydroxybenzoic acids, A., 339.
- See also Bhatt, *C. T.*
- Shah, *N. M.*, air-bath, A., 465.
- See also Alimchandani, *R. L.*
- Shah, *R. C.*, dry ether as solvent for anhydrous aluminium chloride in organic synthesis, A., 63.
- and Ichaporía, *M. B.*, reactions of *p*-dimethylaminobenzophenone and the Beckmann transformation of *p*-dimethylaminobenzophenoneoxime, A., 345. Imidochlorides. II. Condensation of benzanilide imidochloride with substituted dialkylanilines in presence of anhydrous aluminium chloride; synthesis of dialkylaminobenzophenones, A., 1241.
- Shah, *S. I.*, and Pishavikar, *D. G.*, action of sodium and potassium on compounds containing the NH group, A., 335.
- Shaha, *A.* See Goswami, *M.*
- Shaler Co. See Segnitz, *P. H.*
- Shallcross, *H. L.*, and Shallcross Co., stencil, (P.), B., 267.
- Shallcross Co. See Shallcross, *H. L.*
- Shallock, *E. W.*, and Amer. Ore Reclamation Co., sintering method, (P.), B., 385.
- Shan, *H. C.* See Ehrenberg, *W.*
- Shanafelt, *D. M.* See Shonkwiler, *A. H.*
- Shands, *E. H.*, Bruton, *G. L.*, and Grimes, *G. J.*, use of sodium cyanide in a neutralising bath in pickling sheet iron for enamelling, B., 1097.
- Shane, *C. D.*, and Spedding, *F. H.*, spectroscopic determination of *e/m*, A., 279.
- See also Spedding, *F. H.*
- Shank, *J. R.*, plastic flow of Portland cement concrete, B., 993.
- Shannon, *J. A.*, excretion of inulin by the dogfish, *Squalus acanthias*, A., 891.
- Shannon, *M. C.*, and Gulf States Steel Co., oxidising briquette [for decarburising open-hearth steel baths], (P.), B., 461.
- Shapiro, *A.*, Lerner, *H.*, and Posen, *E. J.*, colour standard for cholesterol determinations, A., 1552.
- Shapiro, *G. L.*, dewaxing lubricating oils, B., 8.
- Shapiro, *H.*, nomogram for centrifugal force, A., 321.
- Shapiro, *H. A.*, and Zwarenstein, *H.*, effects of injection of ovarian and pituitary extracts on serum-calcium in normal, ovariectomised, and hypophysectomised toads, A., 412.
- Shapiro, *I.*, ketosis. V. Comparative glycogenic and ketolytic action of glucose and some carbohydrate intermediates, A., 522.
- Shapiro, *M. I.* See Frost, *A. F.*
- Shapiro, *R.*, respiration of fragments obtained by centrifuging the egg of the sea urchin, *Arbacia punctulata*, A., 1013.
- Shapleigh, *J. H.* See Hercules Powder Co.
- Shaposhwik, *I. P.* See Korab, *S. I.*
- Shapovalov, *M.*, chemical splitting of the tomato "combination-streak" virus complex, A., 798.
- Shapter, *R. E.*, chemical composition of certain pasture species at flowering and maturity, B., 1061.
- Sharan, *S.*, negative hysteresis in nickel, A., 1452.
- See also Gupta, *M. M. S.*
- Sharkov, *V. I.*, and Beljaevski, *I.*, extraction of furfuraldehyde from aqueous solutions, A., 984.
- and Petrotschenko, *A. P.*, preparation of xylose syrup from aspen wood, B., 1064.
- Sharkova, *F. R.* See Altschudshan, *A. A.*
- Sharma, *K. K.* See Joshi, *S. S.*
- Sharma, *P. N.* See Mohammad, *W.*
- Sharma, *R. S.*, absorption spectra of saturated halides, A., 427.
- Sharp, *D. E.* See Horak, *W.*
- Sharp, *F. L.* See Imperial Chem. Industries.
- Sharp, *J. G.*, *post-mortem* breakdown of glycogen and accumulation of lactic acid in fish-muscle at low temperatures, A., 658. Glycogenolysis in fish-liver at low temperatures, A., 658.
- Sharp, *P. F.*, and Cornell University, [β -]lactose, (P.), B., 649.
- See also Troy, *H. C.*
- Sharp, *T. M.* See Henry, *T. A.*
- Sharp & Dohme, Inc. See Johnson, *T. B.*, and Reichel, *J.*
- Sharpe, *B. A.*, and O'Kane, *B. J.*, properties of dielectrics at high frequencies, B., 1100.

- Sharples Solvents Corporation, and Thomas, C. Allen, alkyl derivatives of phenolic compounds [*p*-tert.-amylphenol], (P.), B., 140.
- See also Hochwalt, C. A., Olin, J. F., and Thomas, C. Allen.
- Sharples Specialty Co., and Jones, L. D., centrifugal machines, (P.), B., 610.
- Dewaxing of [petroleum lubricating] oil, (P.), B., 793. Dewaxing of [hydrocarbon] oils, (P.), B., 1034. Chemical treatment of petroleum oils, (P.), B., 1127.
- See also Jones, L. D.
- Sharpley, T. A. See Rubber Producers Res. Assoc.
- Sharratt, E. See Jennings, J. S.
- Shatirov, R. M., effect of activated clay [in oil refining], B., 7. Treating Surakhani bottoms from oil of sixth sand for production of lubricating oils, B., 8.
- Shattuck, H. F. See Greene, C. H.
- Shavoronkov, N. M. See Juschkevitch, N. F.
- Shavargin, P. E., degradation and regradation of grey forest soils, B., 197.
- Shavargin, P. I., physical properties and exchangeable bases of chestnut soils, B., 1107.
- See also Pankov, A. M.
- Shaw, A. N., derivation of thermodynamical relations for a simple system, A., 934.
- Shaw, C. H. See Bearden, J. A.
- Shaw, D. L. See Randall, M.
- Shaw, F. H., action of ethylene on cell processes, A., 1165.
- Shaw, F. J. F., Indian oil-seeds, B., 859.
- Shaw, G. E., quinine manufacture in India, B., 286.
- Shaw, G. T. See Steacie, E. W. R.
- Shaw, J. A., gas-absorption bulb for use with small amounts of reagent, A., 58.
- See also Koppers Co., of Delaware.
- Shaw, J. L., and Downing, V., determination of oxygen in blood in the presence of ether, A., 770.
- Shaw, M. See Sickles, G. M.
- Shaw, M. B., Bicking, G. W., and O'Leary, M. J., relation of some properties of cotton rags to strength and stability of experimental papers made from them, B., 845.
- See also Weber, C. G.
- Shaw, M. M. See Franks, W. R.
- Shaw, R. See Donal, J. S., jun.
- Shaw, R. W., vibrational analysis of the GeO emission band spectrum, A., 9.
- and Gibbs, R. C., hydrogen-isotope effect in the OH bands, 3064 and 3121 Å., A., 1299.
- Shaw, W. M., and MacIntire, W. H., determination of adsorbed bases [in soil] by boiling with ammonium chloride, and utility of the procedure in related soil investigations, B., 687.
- See also MacIntire, W. H.
- Shawhan, E. N., band spectrum of Pb, in absorption and emission, A., 1292.
- Absorption spectrum of tin sulphide, A., 1299.
- and Morgan, F., absorption spectrum of lead oxide, A., 562.
- Shawinigan Chemicals, Ltd., manufacture of films, threads, sheets, etc., and of [polyvinyl] resins therefor, (P.), B., 1153.
- Schepak, M. I. See Svechnikov, V. N.
- Shdanov, A. P., formation of branched tracks (due to α -particle collisions) on photographic plates covered with a heavy layer of emulsion, A., 6.
- Shdanov, G. See Iveronova, V.
- Shdanov, H. S., determination of numbers of small particles from Debye-Scherrer photographs, A., 570.
- Sheaff, E. H., and Nat. Lead Co., refining of white-metal scrap, (P.), B., 680.
- See also Thompson, G. W.
- Shear, G. M., growth of *Agaricus campestris* on plots treated with sodium chlorate, B., 690.
- Sheard, L., tanning material analysis, B., 819.
- Shearer, J., wave-length measurements of the Ni $L_{\alpha 1,2}$ and Ni $L_{\beta 1}$ lines of metallic nickel and of nickel salts, A., 1293.
- Shearin, P. E., infra-red absorption spectrum of solid hydrogen chloride, A., 1300.
- Sheather, A. L. See Minett, F. C.
- Shedlovsky, T., and MacInnes, D. A., first ionisation constant of carbonic acid, 0° to 38°, from conductance measurements, A., 1321.
- Sheehan, J., ball or tube mill, (P.), B., 1026.
- Sheehy, E. J., effect of storage on colour and free fatty acid content of a commercial sample of veterinary cod-liver oil, B., 859.
- Sheen, R. T., Kahler, H. L., and Ross, E. M., turbidimetric determination of sulphate in water; Betz-Hellige method, B., 880.
- Sheet & Tin Plate Co. See Cook, W. O.
- Sheets, O., Pearson, R. W., and Gieger, M., determination of copper in organic matter, A., 639.
- and Sulzby, A. F., iron content of sorghum and sugar-cane syrups, B., 283.
- Shehyn, H., determination of silicon in aluminium alloys, B., 313.
- Shelbourn, E. T. See Coste, J. H.
- Sheldon, H. H., Lorenz, C. F., and Sheldon Electric Corp., comparison of colours [electrically], (P.), B., 596.
- Sheldon, J. H., hæmochromatosis, A., 108.
- Sheldon, J. L., determination of indices of refraction of liquids, A., 1097.
- Sheldon Electric Corporation. See Sheldon, H. H.
- Sheldrick, G. See Haworth, R. D.
- Shelford, V. E. See Coventry, F. L.
- Shell Development Co., Burgin, J., and Groll, H. P. A., acetylene, (P.), B., 343. Removal of acetylene from gases, (P.), B., 393.
- and Deanesly, R. M., inhibition of halogen-substitution reactions, (P.), B., 138. Sulphuric esters [from olefines], (P.), B., 182.
- and De Simo, M., ketones, (P.), B., 139.
- and Edlund, K. R., esters, (P.), B., 139. Monoethers of glycols [solvents], (P.), B., 618.
- Edlund, K. R., and Evans, T., preparation of olefine derivatives, (P.), B., 619. tert.-Ethers [solvents], (P.), B., 715.
- Engs, W., and Moravec, R., alcohols containing more than four carbon atoms, (P.), B., 182. Alcohols, (P.), B., 182. [Secondary] alcohols from olefines, (P.), B., 618.
- and Klemgard, E. N., lubricating greases, (P.), B., 713, 892.
- and Kramer, G. A., absorption of olefines [and treatment of immiscible liquids], (P.), B., 138. Control of exothermic reactions, (P.), B., 531.
- Shell Development Co., Kramer, G. A., and Rosenstein, L., recovering sulphur content of gases, (P.), B., 227. Nitrogenous products [nitric acid from ammonia], (P.), B., 269.
- and Lewis, R. I., refining [desulphurising] hydrocarbons, (P.), B., 215.
- Peski, A. J. van, and Smithuysen, W. C. B., alcohols [from olefines], (P.), B., 182.
- and Pyzel, D., ammonia, (P.), B., 672. Removal of acetylene [from hydrocarbon gases], (P.), B., 1127.
- and Pyzel, F. M., thermal decomposition of hydrocarbons, (P.), B., 892.
- and Rosenstein, L., refining of mineral oils, (P.), B., 712.
- and Smith, S. S., process of rectification, (P.), B., 1076.
- and Snyder, L. J., sweetening of hydrocarbon oil, (P.), B., 1128.
- and Tijmstra, S., treatment [blowing] of hydrocarbon, (P.), B., 663.
- Shell Petroleum Corporation. See Hansen, J., and Tijmstra, S.
- Shellenberger, R. See Babcock & Wilcox, Ltd.
- Shelling, D. H., Asher, D. E., and Jackson, Deborah A., calcium and phosphorus. VII. Effect of variations in dosage of parathormone, calcium, and phosphorus in diet on concentrations of calcium and inorganic phosphorus in serum and on histology and chemical composition of the bones of rats, A., 409.
- and Jackson, Deborah A., calcium and phosphorus. XI. Effect of prophylactic and curative doses of standardised viosterol on human tissues; necropsy report of thirteen cases showing no tissue damage, A., 1036.
- and Josephs, H. W., calcium and phosphorus. X. Effect of variation of calcium, phosphorus, and vitamin-D in the diet on iron retention in rats, A., 1036.
- Shellmar Products Co., etching [of intaglio cylinders], (P.), B., 638.
- Shelow, E., near infra-red absorption of calciferol, A., 11.
- Shelton, D. D., retort, (P.), B., 82.
- Shelton, G. R., nature of the glass phase in heated clay materials. I. Common clays, B., 1094.
- Shelton, S. M. See Harrison, W. N.
- Shemochkin, A. See Baidan, G. K.
- Shen, P. T., morphine hyperglycæmia, A., 397. Strychnine hyperglycæmia, A., 397.
- Shen, T. C., and Ling, S. M., metabolism of ducks (*Anas platythyncha*, L.) II. Gas metabolism and respiratory quotient. III. Carbohydrate metabolism, A., 238.
- Shenk, W. E., and Fenwick, F., electrometric titration; device for automatically stopping at a predetermined endpoint, A., 839.
- Shenon, P. J., genesis of the ore at the Flathead Mine, N.W. Montana, A., 1478.
- Shepard, A. F., rubber vulcanisation; formation of dimethyldithiocarbamic acid derivatives in vulcanisation with tetramethylthiuram di- and mono-sulphides, B., 600.
- Shepard, H. H., and Lindgren, D. L., relative efficiency of fumigants against rice weevil and confused flour beetle, B., 250.

- Shepard, M. G., Burns, E. R., and Dispersions Process, Inc., treatment of scorched rubber compounds, (P.), B., 241.
- Shepherd, B. F., the P-F characteristic of steel, B., 499.
- Sheppard, L. See Walker, Florence.
- Sheppard, S. E., and Newsome, P. T., properties of cellulose esters of homologous fatty acids, A., 434.
- See also Eastman Kodak Co.
- Sheppard, S. R., anodic treatment of aluminium and its alloys, (P.), B., 957.
- Sherborne, J. E. See Sage, B. H., and Yost, D. M.
- Sherdeva, L., and Shirjaeva, G., determination of iodine value, B., 859.
- Sherebov. See under Zharebov.
- Sheridan, S. A. See Ostermann, R. M.
- Sherk, K. W. See Hought, A. G.
- Sherlock, J., continuous kilns for burning bricks, terra cotta, etc., (P.), B., 228.
- Sherman, A., Sun, C. E., and Eyring, H., addition of symmetrical diatomic molecules to benzene, A., 284.
- Sherman, H., and Barbour, H. G., heat regulation and water exchange. XIX. Reversal of febrile liver hydration with amidopyrine antipyresis, A., 656.
- Sherman, H. C., and Campbell, H. Louise, relation of food to regularity of nutritional response, A., 1154.
- and Todhunter, E. N., determination of vitamin-A values by a method of single feeding, A., 261.
- See also Bessey, O. A., Campbell, H. Louise, and Fincke, M. L.
- Sherman, J. C., and Brown Co., artificial leathers for use as shoe-soles, bolting, and analogous products, (P.), B., 352.
- Sherman, M. S. See Sando, C. E.
- Sherman, R. A., Blanchard, J. R., and Demorest, D. J., effect of tempering coal on its combustion, B., 739.
- Sherman, W. C., Elvehjem, C. A., and Hart, E. B., availability of iron in biological materials, A., 115.
- Sherratt, G. C., and Griffiths, Ezer, determination of specific heat of gases at high temperatures by sound velocity method. I. Carbon monoxide, A., 155.
- Sherratt, J. G., water in bone meal and in meat and bone meal, B., 476.
- Sherratt, W., and Cooke, W. R., [machine for] drying and finishing of [knitted] textile fabrics, (P.), B., 145.
- Sherts, J. H., and Duplate Corp., non-glare safety glass, (P.), B., 1095.
- Sherwin-Williams Co. See Appleton, L. F., and Todd, J. D.
- Sherwood, L. T., water-jackets for glass-melting tanks, B., 767.
- Sherwood, T. K., and Garono, L. E., drying heavy leather in five hours, B., 1105.
- and Jenny, F. J., entrainment in plate columns, B., 530.
- Shewan, J. M., chromic acid modification of the Kjeldahl method for determination of nitrogen in organic compounds, A., 1140.
- See also Robertson, I. M.
- Shiba, H., and Inouye, Toshi, absorption spectra of solutions in liquid ammonia. I. Solutions of metallic complex salts, A., 1443.
- Shiba, K., values of Planck's constant, A., 1443.
- Shibata, K., protein structure and synthetic substrates for proteases, A., 533.
- Shibata, M. See Nakashima, T.
- Shibata, Y., and Harai, K., absorption spectra of solutions of coloured metallic salts at low temperatures, A., 1299.
- and Yamasaki, Kazuo, oxidising action of colloids. III. Oxidising action of colloidal metals, A., 44. Catalytic oxidation action of colloids. III., A., 830.
- Shibata, Z., and Niwa, K., vapour pressures of aqueous potassium chloride solutions, and their thermodynamic utilisation, A., 1203.
- Shibuya, K., and Saeki, H., effect of vanadium on growth of plants. II., B., 967.
- and Torii, T., unfavourable effects of iron salts on availability of potash fertilisers, B., 966.
- Shicharevitch, S. A., and Kogan, G. L., high-grad semi-acid ladle linings, B., 851.
- See also Budnikov, P. P.
- Shidei, J., Hashizume, S., and Kitahara, S., action of light in solution of amorphous selenium in carbon disulphide, A., 1331.
- Shidei, T. See Nakamura, G.
- Shields, T. P., rhodium-plating [bath], (P.), B., 315.
- Shields, W. S., handling sewage sludge, (P.), B., 832.
- Shiffner, W. H. See Standard Oil Co. of California.
- Shigematsu, S. See Tomiyama, T.
- Shigetomi, S. See Abe, Suekichi.
- Shih, C. See Lei, H. H., and Li, Y. H.
- Shih, J. W. See McKeehan, L. W.
- Shiina, S., heneicosoic acid, A., 64.
- Shikata, M., electrolytic reduction potentials of organic compounds. XXI. Ascending part of the current-voltage curve of electrolysis; "adsorption current," A., 826.
- and Akagi, K., cellulose resources. III. Rayon pulp from cotton stalks, A., 1435.
- Akagi, K., and Urano, N., cellulose resources. I. Composition of Deccan hemp and Indian mallow cultivated in Manchuria, A., 1435.
- and Tachi, I., electrolytic reduction potentials of organic compounds. XIX. Limiting currents of the current-voltage curves, A., 305.
- Tachi, I., and Yasuzaki, N., distribution of copper in the rice plant cultivated on soils containing copper, A., 552.
- and Taguchi, E., electrolytic reduction potentials of organic compounds. XX. Reduction potential of quinine, A., 706.
- and Watanabe, M., bog-moss. I. Chemical composition of *Sphagnum fimbriatum*, Wils. (Himemizugoke). II. *Sphagnum* cellulose, A., 266, 421.
- Shile, V. I., and Avakova, E. S., light-sensitivity of paraffin wax, B., 133.
- Shilianski, Z. See Feigin, D.
- Shillito, F. H. See Bidwell, E. H.
- Shilov, E. A., limits of aldol condensation of acetaldehyde, A., 962.
- and Burmistrov, S., synthesis of di-*p*-xenylyketen, A., 751.
- and Kupinskaja, G. V., rate of hydrolysis of chlorine, A., 938.
- Shimada, J., experimental scurvy. XXIII. Blood-ketones in guinea-pigs fed on a vitamin-C-free diet, A., 386.
- Shimada, Keiichi, microchemical analysis of rubber. I., B., 240.
- Shimada, Kunio. See Uno, D.
- Shimada, M., tin-plating from an alkaline bath, B., 679.
- Shimadzu, S., determination of thickness of the [oxide film] on the surface of metallic lead, A., 918.
- Shimamoto, T. See Sahashi, Y.
- Shimanovich, S. B. See Kostenko, A. S.
- Shimaoka, T. See Funaoka, S.
- Shimizu, Y. See Honda, K.
- Shimmura, T., coking property of coal, B., 932.
- Shimodaira, K. See Hoshino, T.
- Shimomura, A., properties of coking coals, B., 52. Low-temperature coke as a blending material [in coke manufacture], B., 932.
- Shimp, J. H. See Whittaker, C. W.
- Shimwell, J. L., resistance of beer towards *Saccharobacillus pastorianus*, B., 695.
- Shindo, H. See Sugii, Y.
- Shine, W. M. See Cori, C. F.
- Shinkai, S., and Takahashi, K., determination of ferrous iron in glass, B., 591.
- See also Takahashi, K.
- Shinké, G. A. See Besborodov, M. A.
- Shinn, L. A. See Meigs, E. B.
- Shinoda, G., X-Ray investigations on thermal expansion of solids. II., A., 918.
- Shinoda, S., application of X-ray spectroscopic method to the analysis of the rarer elements. III. Determination of praseodymium in rare-earth mixtures, A., 1338.
- Shinohara, K., determination of thiol and disulphido compounds, with special reference to cysteine and cystine. I. Colour reaction between phospho-18-tungstic acid reagent and thiol compounds. II. Reaction between phospho-18-tungstic acid reagent and other substances than thiol compounds, A., 877, 1111.
- See also Medes, G., and Yost, D. M.
- Shinohara, U., mechanism of pure electric breakdown of solid and liquid insulators, B., 193.
- Shinozaki, Y., and Kubo, H., high-pressure hydrogenation of soya-bean oil. I. Products by copper catalyst. II. Properties of the sodium salt of the sulphuric ester of the higher fatty alcohol. III. Formation of wax-ester. IV. Formation of hydrocarbon, B., 318, 416.
- Shinra, K. See Hachihama, Y.
- Shiomi, S. See Kamei, S.
- Shipley, J. W., evolution of CO₂ in a-c. electrolysis of sodium carbonate and hydrogen carbonate solutions and discharge potentials of carbonate and hydrogen carbonate ions, A., 45.
- Shirahama, K. See Takahashi, E.
- Shirakawa, Y. See Honda, K.
- Shiras, M., iron or steel, (P.), B., 906.
- Shirato, K., prevention of scaling-off of enamel on copper wire, B., 104.
- Shirato, Y., rôle of liver, spleen, and reticulo-endothelial system in fat and lipin metabolism. I. Total fatty acids and cholesterol of blood following liver injury. II. Total fatty acids and cholesterol of blood following splenectomy and blockade of the reticulo-endothelial system, A., 523.
- Shire, E. S. See Oliphant, M. L. E.
- Shirjaeva, G. See Sherdeva, L.
- Shirnova, N., fusion diagram of the system ZrO₂-SiO₂, A., 703.
- Shirokaya, V. See under Shirokaia, V. N.
- Shirokikh, P. K. See Khomjakov, K. G., and Popov, M. M.

- Shirov, *N. F.*, preparation of phosphorescent substances. VII. Boric anhydride, A., 313.
- Getman, *T. E.*, and Matenko, *E. J.*, preparation of phosphorescent substances. VIII. Boric acid. II. IX. X-Ray luminophores, A., 565, 1470.
- Shishido, *H.* See Goto, *K.*
- Shiskin, *C.* See Widdows, *S. T.*
- Shiukin, *N. I.* See Zelinski, *N. D.*
- Shive, *J. W.*, nitrogen absorption [by plants] and aëration, A., 795.
- See also Arrington, *L. B.*, and Davidson, *O. W.*
- Shive, *R. A.* See Du Pont de Nemours & Co., *E. I.*
- Shivers, *G. C.*, self-contained pH -indicating drug, (P.), B., 124.
- Shivov, *V. G.*, filling of instruments with liquids through capillary tubes, A., 321.
- Shivrina, *A. N.*, and Onokhova, *N. P.*, vitamin-C in dried fruit, berries, and vegetables, A., 546.
- See also Prozorovskaja, *L. L.*
- Shkolnikov, *Y. A.* See Kitaigorodski, *I. I.*
- Shlevin, *E. L.* See Wishnofsky, *M.*
- Shmanenkov. See under Schmanenkov.
- Shmerling, *A. A.* See Izrailson, *Z. I.*
- Shneider, *F.* See under Schneider, *F.*
- Shnidman, *L.*, solubility of ammonium thiocyanate in water, methyl alcohol, and ethyl alcohol, A., 25. Determination of water in by-product sulphur, B., 849.
- Shochet, *D.*, slow combustion of liquid pinane, A., 1375.
- Shoeld, *M.* See Koppers Co. of Delaware.
- Shoemaker, *B. H.* See Rogers, *T. H.*
- Shoenberg. See under Schoenberg.
- Shoiner, *L.* See Felsing, *W. A.*
- Shoikhem, *I. I.* See Khelemski, *M. Z.*
- Shoji, *H.*, transformation of magnetite at low temperature, A., 1194.
- Shōji, *K.*, flavour of shōyu. I., A., 1540.
- Shojino, *M.* See Kita, *G.*, and Sakurada, *I.*
- Shone, *L. J.*, artificial staple fibres, (P.), B., 668.
- Shonkwiler, *A. H.*, and Shanafelt, *D. M.*, finishing ferrous sheet material, (P.), B., 273.
- Shonle, *H. A.*, barbituric acids containing a sec.-amyl group, A., 94.
- and Kleiderer, *E. C.*, mixed m.-p. curves of dialkylbarbituric acids, A., 94.
- and Lilly & Co., *E.*, propylmethylearbinyllallyl-[5-allyl-5- β -amyl]-barbituric acid and its salts, (P.), B., 205. sec.-Butylcarbinyloethylbarbituric compound [5-ethyl-5- β -methylbutylbarbituric acid], (P.), B., 924. Ethylsec.-hexylbarbituric acid and its salts, (P.), B., 1165.
- Shook, *T. W.*, tunnel kilns, etc., (P.), B., 101.
- Shoosmith, *G. T.*, and Hockley, *C. F.*, adsorption system, (P.), B., 290.
- Shoppee, *C. W.* See Burton, *H.*
- Shore, *A. F.*, apparatus for measuring hardness of materials, (P.), B., 882.
- Shorland, *F. B.*, glycol esters of diabasic acids; di- β -hydroxyethyl esters, A., 327. Vitamin-A content of New Zealand ling-liver oil; seasonal variations in the vitamin and general characteristics of the oil, B., 683. Aluminium as an index of soil contamination, B., 777.
- See also Grimmer, *R. E. R.*
- Shorrock, *J. N.* See Rhead, *T. F. E.*
- Short, *D. M.* See Grimm, *P. D.*
- Short, *W. F.*, constitution of codrene, A., 1376.
- See also Higginbottom, *A.*, and Hill, *P.*
- Short Milling Co., *J. R.*, Haas, *L. W.*, and Renner, *H. O.*, organic oxidation products of fatty matter, (P.), B., 365. Baked products, (P.), B., 379.
- See also Haas, *L. W.*, and Véron, *D.*
- Shortley, *G. H.*, line strengths in intermediate coupling, A., 556.
- Shortt, *H. E.*, and Brooks, *A. G.*, rabies fixed virus as an antigenic agent when inactivated by the photodynamic action of methylene-blue, A., 1395.
- and Mallick, *S. M. K.*, detoxication of snake venom by the photodynamic action of methylene-blue, A., 1394.
- Shotwell, *R. L.* See Parker, *J. R.*
- Shoyket, *D. N.* See Ageev, *N. V.*, Kurnakov, *N. S.*, and Osokoreva, *N. A.*
- Shpeliti, *K. N.* See Nekrasov, *Z. I.*
- Shrader, *S. A.* See Drake, *N. L.*
- Shraibman, *S. S.*, and Baleev, *A. V.*, corrosion of iron, copper, and lead in calcium chlorate liquors, B., 410.
- Shrawder, *J., jun.*, and Cowperthwaite, *I. A.*, activity coefficient of sulphuric acid at temperatures from 0° to 50°, A., 34.
- Cowperthwaite, *I. A.*, and La Mer, *V. K.*, revision of normal electrode potentials, A., 37.
- See also Cowperthwaite, *I. A.*
- Shrikhande, *J. G.* See Giri, *K. V.*, Norman, *A. G.*, and Richards, *E. H.*
- Shriner, *R. L.* See Ruberg, *L. A.*, and Schreiber, *R. S.*
- Shrivastava, *D. L.* See Linton, *R. W.*
- Shropshire, *L. P.*, and Sinclair Refining Co., emulsifier, (P.), B., 978.
- Shrukry, *H.* See Payne, *W. W.*
- Shtandel, *G.* See Prokofiev, *V. K.*
- Shternov, *I. A.* See Klarman, *E.*
- Shtrum, *L.*, binding energy of atomic nuclei and the system of isotopes, A., 804.
- Shturm, *L. D.*, origin of balthashite, A., 60.
- Shu, *C. F.*, alkaloid of the seeds of *Leonurus sibiricus*, L., A., 422.
- Shubin, *G.*, elementary derivative of the statistical fundamental formulae of chemical thermodynamics, A., 691.
- Shubin, *M. I.*, determination of small quantities of aluminium in special iron-containing copper-zinc alloys, B., 64.
- Shubin, *N.* See Dobrovidov, *A. N.*
- Shubin, *S.*, and Vonsovski, *S.*, electron theory of metals. I., A., 1298.
- Shubnikov. See under Schubnikov.
- Shuck, *A. L.*, growth-inhibiting substance in lettuce seeds, A., 674.
- Shuey, *G. A.*, modified method for removal of added ingredients from phosphated and self-raising flours in order to determine the ash content of the original flour, B., 697.
- See also MacIntire, *W. H.*
- Shuey, *P. M.*, ground phosphate rock as substitute for filler in fertiliser mixtures, B., 116.
- Shukov, *I. I.*, and Rajchinshtein, *C.*, potentiometric determination of sulphates, A., 184.
- Shull, *J. C.* See Parpart, *A. K.*
- Shultz, *A. I.* See Skorcheletti, *V. V.*
- Shultz, *R. E. S.*, and Davtjan, *E. A.*, tetrachloroethylene as an anthelmintic, B., 828.
- Shumacker, *H. B., jun.*, and Firor, *W. M.*, inter-relationship of the adrenal cortex and the anterior lobe of the pituitary, A., 789.
- See also Grollman, *A.*
- Shumaker, *R. L.* See Heron, *S. D.*
- Shuman, *R. L.*, plasticisers [for cellulose nitrate], B., 598.
- Shumilov, *A. I.* See Kuruindin, *K. S.*
- Shunk, *I. V.*, comparison of presumptive tests for the *coli aerogenes* group of bacteria, A., 786.
- Shupe, *I. S.*, detection and determination of 2:4-dinitrophenol in tablets and capsules, B., 1022.
- Shur, *J.*, and Jaanus, *R.*, magnetic susceptibility of bromine vapour, A., 1312.
- See also Jaanus, *R.*
- Shuravlev, *F. V.*, correlation between protein content and other properties of wheat, B., 1017.
- Shuravleva, *T. G.* See Maklakov, *N. F.*, and Riss, *I. G.*
- Shutak, *D. L.* See Barbaumov, *N. I.*
- Shutt, *F. T.*, and Wright, *L. E.*, peat, muck, and mud deposits: their nature, composition, and agricultural uses, B., 820.
- Shutt, *W. J.*, anodic passivation, A., 585.
- Shuvalov, *S.*, and Bromberg, *A.*, sensitometry of mixed emulsions, B., 574.
- Shvartzman, *E. M.* See Milanov, *L. K.*
- Sibaiya, *L.*, hyperfine structure of arc lines of molybdenum and copper, A., 136.
- Ratio of the temperature coefficients of surface tension and density, A., 685. Diamagnetic susceptibility of water polymerides, A., 689. Temperature coefficients of surface tension and thermal expansion, A., 1070. Magnetic susceptibility of ice, A., 1197. Hyperfine structure in selenium, palladium, and gold, A., 1437.
- See also Venkatesachar, *B.*
- Sibata, *R.*, and Nisi, *T.*, synthesis of blue sulphur dyes, A., 634.
- Sibelius, *H.*, gravimetric determination of calcium as oxalate, A., 596.
- Sibi, *M.* See Slatineanu, *A.*
- Sibley, *R. L.*, and Rubber Service Labs. Co., salts of diphenylguanidine, (P.), B., 93. Age-resisting rubber product, (P.), B., 280. Rubber composition and preservation of rubber, (P.), B., 370.
- Siboni, *R.*, synthetic hydrocarbons with carcinogenic action, A., 1526.
- Sibul, *I.*, histamine content of the lungs, A., 1422.
- Sickles, *G. M.*, and Shaw, *M.*, micro-organism which decomposes the specific carbohydrate of *Pneumococcus* type VIII., A., 1420.
- Sickman, *D. V.*, and Rice, *O. K.*, thermal decomposition of propylamine, A., 307.
- See also Forbes, *G. S.*, and Rice, *O. K.*
- Sicnasi, *B.* See Olmer, *J.*
- Siddappa, *G. S.*, and Subrahmanian, *V.*, rôle of organic matter in plant nutrition. V. Influence of minute quantities of forms of organic matter on growth of barley, B., 165.
- See also Iyer, *C. R. H.*, and Manjunath, *B. L.*
- Siddiqui, *M. R.*, generalised equation of heat conduction, B., 433.
- Siddiqui, *R. H.* See Siddiqui, *S.*

- Siddiqui, S., and Siddiqui, R. H., alkaloids of *Holarrhena antidysenterica*. III. Action of cyanogen bromide on conessine and its *N*-demethylation to isoconessimine and conimine, A., 365. Alkaloids of *Rauwolfia serpentina*, Benth. II. Ajmaline series, A., 636.
- Sidersky, D., history of density tables for sucrose solutions, B., 870.
- Sidersky, H., electrolytic preparation of hydrogen peroxide, A., 1330.
- Sido, M., zinc chloride and the preparation of its solutions, B., 802.
- Sidorov. See Golovati, R. N.
- Siebecke, F., influence of cultivation and manuring on physical condition of Dahlem soils, B., 324.
- Siebel, F. P., jun., and Singruen, E., application of oxidation-reduction potential to brewing control, B., 1015.
- Siebel, G. See Schmid, Erich.
- Siebel, H. See Abderhalden, E.
- Siebeneck, H. See Thiel, A.
- Sieber, R., sp. gr. of pulpwood, B., 986.
- Siebert, C. See Cohn, Henryk.
- Siebert, C. A., and Upthegrove, C., oxidation of a low-carbon steel in the temperature range 900–1150°, B., 634.
- Siebert, W. J., and Linton, C. S., comparison of the effects of potassium iodide and of di-iodotyrosine on basal metabolism, A., 781.
- Siebkke, H., follicular hormone and androkinin in excreta during the normal menstrual cycle and administration of folliculin *per os*, A., 413. Male sex ua hormone in the female body, A., 1285.
- Sieck, W., jun., and Garrigue & Co., W., distillation system, (P.), B., 882. Distillation apparatus, (P.), B., 1026.
- Siecke, W., manufacture of sulphuric acid from hydrogen sulphide, B., 1140.
- Siedel, W., constitution of bile pigment. XI. Syntheses of *neo*- and *isoneo*-xanthobilirubin acid, A., 631.
- Siedler, P., theory of flotation, A., 1317.
- Sieg, L. See Menzel, H.
- Siegbahn, M., and Magnusson, T., higher series of Röntgen spectra, A., 424. *O* series of Röntgen spectra, A., 424. Spectroscopy of ultra-soft X-rays. IV. and V., A., 909, 1306.
- Siegel, S. See Laufer, S.
- Siegert, A., effect of binding on effective cross-section with respect to very rapid electrons, A., 274.
- Siegfried, H. See Kutter, F.
- Siegle, J., pearlite structure of a cold-drawn wire, B., 904.
- Siegle & Co. G.m.b.H., G., cadmium pigments, (P.), B., 466.
- Siegler, R., superphosphate industry in German political economy, B., 451.
- Sieglerschmidt, H., and Fiek, G., tensile tests on antimonial lead tubes, B., 500.
- Siegmund, H., pathogenesis of silicotic tissue changes. I. Experimental production of silicotic welts by quartz and colloidal silicic acid, A., 1022.
- Siegrist, W. See Fichter, F.
- Siemann, J. C. See Charch, W. H.
- Siemens Bros. & Co., Ltd., and Riber, C. R., electric dry cells, (P.), B., 30. [Fixing metal terminals to electrodes of] electric batteries, (P.), B., 363.
- Siemens Electric Lamps & Supplies, Ltd., and Aldington, J. N., electric-discharge lamps, (P.), B., 812.
- Siemens & Halske Akt.-Ges., insulating materials [containing rubber] for electrical purposes, (P.), B., 30. Photographic production of written characters or representations on aluminium or aluminium alloys, (P.), B., 46. Material, and bodies formed therefrom, for polishing, smoothing, and grinding of very hard objects, particularly hard alloys, (P.), B., 188. Coreless induction furnace, (P.), B., 237. Hard sintered carbide materials, (P.), B., 505. Sintered bodies [of hard carbide alloys], (P.), B., 556. Electrolytic water decomposer, particularly for high-pressure operation, (P.), B., 774. Rubber mixture for purposes of electrical insulation, especially for marine communication cables, (P.), B., 776. Production of flexible insulation on electric conductors from polystyrol, cellulose derivatives, or similar substances, (P.), B., 910. Metallic photographic film, (P.), B., 975. Induction furnace with an open iron yoke, (P.), B., 1052. Photographic copying process, (P.), B., 1070. Photographic production of written characters or representations, or a surface coloration, on aluminium and aluminium alloys, (P.), B., 1119. Avoidance of pressure variations in electrolytic water decomposers working under pressure, when drawing off the gases produced therein, (P.), B., 1148. See also Engelhardt, V., and Gehrts, A.
- Siemens-Lurgi-Cottrell-Electrofilter Ges.m.b.H. für Forschung & Patentverwertung, apparatus for electrical precipitation of suspended particles from gaseous fluids, (P.), B., 67. Electrical separation of suspended particles from gaseous fluids, (P.), B., 108.
- Siemens-Planawerke Akt.-Ges. f. Kohlefabrikate, operation of electric furnaces, (P.), B., 316. [Electrodes for] electrolysis furnaces for production of aluminium, (P.), B., 957.
- Siemens-Reiniger-Werke Akt.-Ges., fluorescent screens, (P.), B., 508.
- Siemens-Schuckertwerke Akt.-Ges., filling material for generator-absorbers of absorption refrigerating apparatus, (P.), B., 386. See also Noebel, E.
- Siemering, R. See Wagner, Hubert.
- Siems, H. B., and Swift & Co. Fertilizer Works, salts, (P.), B., 1092.
- Sienkiewiczowa, R. J. See Malachowski, R.
- Sierra, F. See Burriel, F., and Del Campo, A.
- Siever, C. H., preservation of vegetable cellulosic material, (P.), B., 1041.
- Sievers, R. F. See McIntyre, A. R.
- Sievert, C. W. See Magraw, D. A.
- Sievert, G. See Eisenbrand, J.
- Sieverts, A., and Zapf, G., iron and nitrogen, A., 577. See also Schreiner, L.
- Siewers, H. See Jellinek, K.
- Sifferd, R. H., and Du Vigneaud, V., synthesis of carnosine; splitting of the benzyl group from carbobenzyloxy derivatives and from benzylthio-ethers, A., 628.
- Sigalova, R. R. See Goldstein, B., and Palladin, A. F.
- Sigilman, I. G. See Jackson, F. W.
- 'Sigmund, A. J. von, manuring of newly cultivated soils. XIII. Hungary, B., 515.
- Signaigo, F. K. See Campbell, J. M.
- Signer, R., ultracentrifugal measurements with synthetic highly polymerised substances, A., 162. Behaviour of complex and very complex molecules in solution, A., 700. Behaviour of high-molecular compounds in solution, A., 700.
- Signy, A. G. See Schlesinger, B.
- Sigwalt, R. See Woog, P.
- Sigwart, A. See Gen. Aniline Works.
- Sihvonen, V., [primary processes in oxidation of graphite], A., 50, 592. Oxidation of graphite. III., A., 714. True activation energy of the desorption of the ketonic group from graphite, A., 829. Comparison between the oxidising effect of X-rays and the electric discharge on diamond and graphite, A., 832. Oxidation of graphite in electrolytic melts, A., 1210.
- Siitonen, T. A. See Palomaa, M. H.
- Sijlmans, C., practical exhaustibility of Java molasses, B., 75.
- Sikes, A. W., and Corey, C. H., effect of continued heating on asphalts, B., 885.
- Silaeva, E., carbohydrate metabolism in hypophysectomised frogs, A., 891.
- Silakov, S. M., corrosion of petroleum-distillation equipment and its prevention, B., 1048.
- Silbereisen, K. See Stockhausen, F.
- Silbermintz, V. A., and Florenski, K. P., determination of vanadium in the field, A., 1474.
- Silberrad, O., pharmaceutical preparations for external application, (P.), B., 974.
- Silberstein, F., and Gottdenker, F., relation of the thyrotropic hormone to the sugar and ketone content of the blood, A., 1543.
- Gottdenker, F., and Hohenberg, E., effect of thyrotropic hormone on ketonic substances in blood, A., 258.
- Silberstein, L., composition of bones: the femur of the horse, A., 377. Synthesis of X-ray filtration curves from Kramers' emission law, A., 679.
- Silbert, S. See Friedlander, M.
- Silesia Verein Chemischer Fabriken, preparation of dibenzthiazyl disulphide, (P.), B., 622.
- Silica Gel Corporation. See Connolly, G. C., and Miller, F. B.
- Silica Products Co. See Cross, R.
- Siline, P. M., crystallisation of sugar and formation of molasses. I. and II., B., 870. and Siline, Z. A., crystallisation of sugar and formation of molasses. III., B., 920.
- Siline, Z. A. See Siline, P. M.
- Silk-Eze Corporation. See Pailler, E. C.
- Sillani, P., and Curti, (Signa.) L., new alkylammonium salt (tetramethylammonium camphorsulphonate), A., 496.
- Silooja, S. S. See Rây, J. N.
- Siloret, G. See Verdié, H.
- Silsbee, F. B., Scott, R. B., Brickwedde, F. G., and Cook, J. Williamson, superconductivity of tin at radio-frequencies, A., 20.
- Silveira, J. See Vilar, J.
- Silver, S. L., and Lowy, A., Friedel-Crafts type reactions on diphenyl, A., 85.
- Silverman, A., colouring agents for glass batches, (P.), B., 949.

- Silverman, L., determination of sulphur in plain and alloy steels; perchloric acid modification of Meinel's method, B., 634.
- Silverman, M. See Todd, J. D.
- Silverman, S., and Sanderson, J. A., infrared spectrum of heavy ammonia, NH_3 , A., 145.
- Silverman, W. B. See Badger, A. E.
- Silverstone, E. L. See Pownall, W.
- Silverthorne, N., and Fraser, D. T., action of human blood on the meningococcus, A., 1421.
- Silvestrini, N. See Bosso, V.
- Silvette, H., chloride, carbohydrate, and water metabolism in adrenal insufficiency and other conditions, A., 107.
- and Britton, S. W., sodium chloride and protein changes induced by adrenalectomy and glucose administration, A., 1400.
- See also Britton, S. W.
- Simakov, S. N., Schvebberger, N. A., and Vialov, O. S., silurian petroleum in Central Asia, A., 1348.
- Simard, R. G. See Harris, L.
- Sime, T., silvring [non-ferrous metals], (P.), B., 156.
- Siméant, L. See Kuppel & Siméant.
- Simex, B. G., Coufalik, F., and Beránek, Z., determination of ash m.p. [of fuels], B., 6.
- and Krémář, J., rational analysis of tar, B., 335.
- and Ludmila, J., binding of water by humic constituents of coal, B., 789.
- Simmich, H., volumetric determination of phosphate, A., 1215.
- Simmonds, F. A., hydration theories and associated phenomena [connected with papermaking], B., 845.
- Simmonds, R. See Sahyun, M.
- Simmons, W. H., Mexican and Indian linaloe oils, B., 174.
- Simmons, W. H., Timms, H., and Plastic Safeglass Synd., safety glass, (P.), B., 1044.
- Simnitzki, V. S., and Komendantova, A. L., effect of a chronic enrichment of the organism with insulin on steadiness of the thyroid secretion, A., 901.
- Simon, Alexander, assay of parathyroid hormone by magnesium sulphate, A., 539.
- See also Bovet, D.
- Simon, Arthur, and Féher, F., Raman effect and constitution of hydrogen peroxide, A., 806.
- and Deckert, H., solution of silver in potassium cyanide solutions, A., 1332.
- and Huter, J., vapour-pressure curves, m.p., and chemical constants of di- and tri-methylamine and isobutylamine, A., 290, 815.
- and Jauch, O., structure of the dielectric in aluminium-electrolyte condensers, A., 1326.
- Simon, A. W., Kron, L. C., and Raymond, H., smoke-density meter device, (P.), B., 533.
- Gas-cleaning apparatus, (P.), B., 533.
- Simon, E. See Aubel, E.
- Simon, F., application of low-temperature calorimetry to radioactive measurements, A., 839.
- Cooke, A. H., and Pearson, H., liquefaction of hydrogen by the expansion method, A., 1096.
- and Swain, R. C., specific heats at low temperatures, A., 574.
- See also Kürti, N.
- Simon, K., relationships between colour and oxidation values of humus extracts, B., 740.
- Humus production from stall manure, B., 1107.
- and Schmidt, Arthur, influence of cultural methods on soluble humus of low-moor peats, B., 372.
- Simon, M. A. See Ku, D. Y.
- Simon, T., Roux, J. C., and Goiffon, R., tyrosine index of polypeptidemia in mental illnesses, A., 1149.
- Simon, Ltd., H., and Brian, J. C., mixing of granular and pulverulent materials, (P.), B., 434.
- Simon-Carves, Ltd., and Brown, J. H., scrubbing of gases with liquids, (P.), B., 533.
- and Robson, J., washer boxes for coal, (P.), B., 890.
- Simonart, A., true methyleholines, A., 849.
- Simonart, P. See Oxford, A. E.
- Simoncini, E., permeability of sole leather to water, B., 818.
- Simonds, R. See King, F. B.
- Simonescu, T. See Tănăsescu, I.
- Simonin, P., and Helluy, J. R., temperature of serum and Kottmann reaction, A., 880.
- Simonnet, H. See Laurent-Gérard, P., and Pénaud, H.
- Simonov, A. M. See Ismailski, V. A.
- Simonovits, S., adsorption and hydrolysis of adsorbed glycogen, A., 697.
- Simons, C. F. E. See Funke, J.
- Simons, J. K., reactivities of groups as revealed by hydrogen bromide cleavage of substituted germanes, A., 1139.
- Simons, L., Raman effect in electrolyte solutions, A., 428.
- Simonsen, J. L., recent progress in the chemistry of the terpenes, A., 983.
- See also Bradford, A. E., Evans, W. C., Francis, E. M., Penfold, A. R., and Ramage, G. R.
- Simonson, E. See Alpern, D.
- Simpson, D. M., relation of moisture content and method of storage to deterioration of stored cottonseed, B., 689.
- Simpson, E. S., and Le Mesurier, C. R., minyulite, a new phosphate mineral from Dandaragan, W.A., A., 1479.
- Simpson, G. L., and Pittsburgh Research Corp., electric heating furnace, (P.), B., 731.
- Simpson, H. T., explosive, (P.), B., 1070.
- Simpson, I. A., vitamin-B₁. II. Oryzatoxin, A., 415.
- Simpson, J. C. E., and Jacobs, W. A., sarsasapogenin. II. III. Deoxysarsasapogenin; further degradations of sarsasapogenin, A., 864, 1248.
- See also Jacobs, W. A.
- Simpson, K. M., chromium steel, (P.), B., 504.
- Simpson, M. E. See Evans, H. M.
- Simpson, O. C. See Copley, M. J.
- Simpson, R., synthetic mill stones, B., 577.
- Simpson, S. G. [with Schumb, W. C.], selenite-phosphate method for determining zirconium in ores, B., 272.
- Simpson, S. L. See Korenchovsky, V.
- Simpson, T. W. See Wood, E. C.
- Simpson, W. T., and Dickinson, H. R., convactor system for oil cracking, (P.), B., 11.
- Sims, F. H., soldering aluminium-brass joints, A., 1098.
- Sims, H. See Annetts, (Miss) M.
- Sims, W. E. See Brit. Aluminium Co.
- Sims, W. F., Cloer, V. U., and Panhandle Refining Co., heat treatment of hydrocarbon oil, (P.), B., 662.
- Sinskaja, A. M., application of fish entrails in preparing enzymic softeners and unhairing substances, B., 114.
- Simon, W. See Schmidt, Erich.
- Sinaiski, L. M. See Kudrjatzev, P. A.
- Sinani, S. S. See Sagaidatschni, A. F.
- Sinclair, H., tentative basis for specifications on wax size [for paper], B., 143.
- Sinclair, I. S., Lakin, T., and Wild-Barfield Electric Furnaces, temperature control of [electric] furnaces, ovens, etc., (P.), B., 29.
- Sinclair, R. D., and McElroy, L. W., addition of protein and calcium to a ration of small grains for growing pigs, B., 699.
- Sinclair, R. G., metabolism of the phospholipins. VI. Relative proportions of saturated and unsaturated fatty acids in phospholipins of different degrees of unsaturation. VII. Selection and retention of unsaturated fatty acids by phospholipins of animal tissues. VIII. Passage of elaidic acid into tissue-phospholipins; evidence of the intermediary rôle of liver-phospholipin in fat metabolism, A., 1397, 1530.
- Sinclair, W. B., Bartholomew, E. T., and Nedvidek, R. D., isolation and distribution of nitrogen in dilute alkali-soluble proteins of healthy Valencia and Washington navel oranges, A., 905.
- See also Bartholomew, E. T.
- Sinclair Refining Co. See Appar, F. A., Arnold, W. P., jun., Barth, E. J., Beardsley, W. H., Gallette, W. S., Herthel, E. C., Isom, E. W., Lord, G. R., Pelzer, H. L., Shropshire, L. P., Smith, R. B., and Spencer, C. F.
- Sinelnikov, K. D. See Kurtschatov, I. V.
- Sinelsch, V. V. See Kaschaev, A. P.
- Singer, A. W., and McElvain, S. M., relative reactivities of certain 2- and 2,6-substituted piperidines, A., 987.
- Singer, E., and Fischl, V., use of drugs *in vitro*, A., 257, 1542.
- Resistance to drugs and chemical tolerance of trypanosomes, A., 1030.
- See also Drummond, J. C., and Fischl, V.
- Singer, Felix, white chemical stoneware, B., 1094.
- Singer, Fritz, and Tubus Akt.-Ges., wrought iron, (P.), B., 906.
- Singer, G. See Wessely, F.
- Singer, H. See Gen. Electric Co.
- Singer, S. C., jun. See Brown, G. G.
- Singer, W. E., Long, J. D., and Davey, W. P., structure of rubber as shown by time lag of fibering, A., 153.
- Singer Manufacturing Co., colouring of wood veneers, etc., (P.), B., 632.
- Colouring of wood, (P.), B., 632.
- Singewald, Q. D., relations of hydrothermal alteration of porphyries to ore deposition in the Alma district, Colorado, A., 1345.
- Singh, A., and Peacock, D. H., reactivity of halogen compounds. III. Velocities of reaction, energies of activation, and probability factors for the reaction between 2,4-dinitrobromobenzene and aromatic primary amines. IV. Effect of addition of inactive substances on rate of reaction, energy of activation, and probability factor, A., 1465.

- Singh, A. D., and Krase, N. W., synthesis of acetic acid from methyl alcohol and carbon monoxide, B., 893.
- Singh, B. K., Pasteur's principle of molecular dissymmetry: *dextro*- and *laevo*-camphoric acids, A., 684.
- Singh, B. N., and Kumar, K., photo-synthetic behaviour of leaves with variations in temperature, A., 1038. Reaction of the assimilatory system to alterations of light intensity, A., 1038.
- and Lal, K. N., effect of age on assimilation of leaves, A., 794. Limitations of Blackman's law of limiting factors and Harder's concept of relative minimum as applied to photosynthesis, A., 1288.
- and Tandon, R. K., temperature-absorption characteristics during germination in seeds of differing structure and biochemical composition under varying concentrations of oxygen and water supply, A., 904.
- Singh, G. See Hamid, M. A.
- Singh, L., and Singh, S. G., cane molasses as a cattle feed, B., 476.
- Singh, M., optical activity and chemical constitution. I. Optically active bases and acids, A., 1127.
- Singh, S. G. See Singh, L.
- Singleton, G., importance of calcium in citrus culture, B., 117.
- Singleton, J. D. See Buss, O. F.
- Singleton, J. T., concentration of [calcium] phosphate, (P.), B., 672.
- Singleton, W., lead pipe for water services, B., 256.
- Singmaster & Breyer, Inc. See Breyer, F. G.
- Singruen, E. See Siebel, F. P., jun.
- Sinha, K. L. See Banerjee, K.
- Siniecki, L. See Jurkowski, A.
- Sinitzin, N. I., and Feigman, V. G., determination of fluorine in phosphorites, B., 723.
- Sinjakova, S. I., determination of small amounts of mercury, A., 464.
- Sinnatt, F. S., hydrogenation of low-temperature tar and tar products, B., 86.
- and King, J. G., hydrogenation, B., 707.
- Slater, L., and Wood, W. J., separation of solid materials, (P.), B., 338.
- Sinton, J. A., and Ghosh, B. N., malarial pigment (hemozoin). III. Action of solvents and of oxidising and reducing agents on optical properties and on crystallisation, A., 125.
- Siomi, K. See Tamaru, S.
- Sipp, K., and Lanz A.-G., H., cast iron, (P.), B., 998.
- Siradjian, J., chloranil, a differentiating reagent for amines, A., 769.
- Sircar, A. C., and Dutt, S. C., xanthane group, A., 497.
- Sircar, S. S. G., and Moktadar, A., crystalline bitter principle from *Andrographis paniculata*, A., 1549.
- Sirian Lamp Co. See Ruben, S.
- Sirianni, G., and De Rienzi, A., chemical composition and nutritive value of some dried-milk samples, B., 42.
- Sirkar, S. C., rotational Raman scattering in benzene vapour, A., 146, 681.
- and Chakravarti, D., bibliography of the Raman effect. III., A., 1445.
- and Maiti, B. B., rotational Raman scattering in benzene at different temperatures, A., 914.
- Sirkin, I. A. See Eimont, I. M.
- Sirkin, Z. N., alkaline corrosion of metals in aniline dye industry, B., 140.
- Sirkina, G. See Alpern, D.
- Sirotenko, D. I. See Danilov, V. I.
- Sirovich, G., and Vanzetti, G., composition of common cast iron for boilers, B., 1046.
- Širuček, J., phenol-2:4-sulphonates, A., 1360.
- See also Čupr, V.
- Siskov, K. See Stadnikov, G. L.
- Sisoev, A. N., production of high temperatures, A., 951. Physico-chemical investigation of solid rectifiers, B., 957.
- Sisson, E. W. See Bosworth, A. W.
- Sisson, W. A., X-ray studies of crystallite orientation in cellulose fibres; natural fibres, A., 286. X-Ray analysis of textile fibres. I. and II. III. Structure of the cellulose crystallite as interpreted from X-ray diffraction data, A., 1308; (P.), B., 220.
- See also Astbury, W. T., and Farr, W. K.
- Sitin, M. V. See Zarubin, N. M.
- Sitschev, D. I. See Klinov, I. J.
- Sitte, K., theory of artificial radioactivity A., 276. Theory of diffusion of electrolytes, A., 443. Radioactivity of potassium, A., 1185. Systematisation of isotopes, A., 1295. Radioactivity of potassium and rubidium, A., 1440.
- Siusskin, N. M. See Plotnikov, V. A.
- Sivertz, V. See Leitz, C. F.
- Sivó, R., and Dobozy, E. von, padutin, A., 1173.
- Siwe, S. A., blood-sugar curve after administration of glucose in children, A., 110. Determination of calcium in blood, A., 1001. Determination of phosphorus in blood with the step photometer, A., 1001. Rickets and spasmophilia. I.—III., A., 1011.
- Sixsmith, G. See Hammick, D. L.
- Sixtus, K. J., magnetic reversal nuclei. V. Propagation of large Barkhausen discontinuities, A., 1310. Bitter's powder patterns, A., 1449.
- Sizoo, G. J., energy of disintegration and a possible structure of the radioactive nuclei, A., 804. Disintegration constant and the upper limit of the continuous β -spectrum, A., 1048.
- Sjöberg, K., and Köhler, G., chemical changes occurring during preparation of silage, B., 379.
- Sjödín, H. See Bodforss, S.
- Sjollema, B., metabolism of potassium and sodium, A., 1274.
- See also Seekles, L.
- Skalov, J., fumigating tobacco with chloropicrin, B., 45. Application of anabasine sulphate as insecticide for tobacco plants, B., 1159.
- Skapski, A., formulation of the law of mass action in homogeneous and heterogeneous systems with regard to metallurgical equilibria, A., 1076.
- Skar, O., reductase test, fermentation test, determination of volume and surface area of micro-organisms; the milk-strainer problem, B., 42.
- Skau, E. L., purification and physical properties of organic compounds. VI. Applications and limitations of the specific heat method as a "non-comparative criterion of purity." VII. Effect of impurities on apparent heat of fusion. IX. Some binary f.-p. diagrams and a study of their ideality, A., 436, 924, 1077.
- Skau, E. L., and Meier, H. F., purification and physical properties of organic compounds. VIII. Thermal study of liquid crystal formation, A., 436.
- Skazin, L., concentrate of true maple flavour, (P.), B., 694.
- and Snell, J. F., non-mottling and non-hardening maple sugar [blocks], (P.), B., 871.
- Skeen, J. W. See Partington, J. R.
- Skellett, A. M., ionising effects of meteors, A., 1443.
- Skelly Oil Co. See Smith, K. J.
- Skelton, W. E. See Texas Co.
- Skenandoo Rayon Corporation. See Gordon, B., jun.
- Skidelski, A. J., and Scheludko, M. K., preparation of ammonium sulphate and ferric oxide from ferrous sulphate solutions, B., 722.
- Skidmore, H. W., low-temperature characteristics of bituminous paving compositions, B., 950.
- Skinner, A. J. See South Metropolitan Gas Co.
- Skinner, C. E., and Sandhoff, A., nitrogen transformations of ammonium thiocyanate (weed eradicator), in soil, B., 516.
- See also Gunderson, M. F.
- Skinner, H. W. B., and O'Bryan, H. M., soft X-rays and energy states of the conduction electron, A., 1438.
- Skinner, J. J., Bart, G. M., and Hughes, A. E., influence of fertilisers and soil amendments on citrus trees, fruit production, and quality of fruit, B., 1011.
- Lineberry, R. A., Adams, J. E., Williams, C. B., and Mann, H. B., nitrogen fertilisers on cotton soils, B., 165.
- See also Jordan, H. V., and Schreiner, O.
- Skinner, L. B., treatment of phosphates [to recover phosphorus], (P.), B., 724.
- Skinner, S. M., efficiency of the tube counter, A., 1295.
- See also Dunning, J. R.
- Skinner, S. S., [condenser for products of the] gasifying of animal and vegetable matter, (P.), B., 793.
- Skinner, Ltd., G. M., waterproofing composition, (P.), B., 684.
- Skirstimonski, A. O., and Vasilenko, M. I., preparation of litharge by electrolysis, B., 1043.
- See also Sagaidatschni, A. F.
- Sklar, H. L., and Micamold Radio Corp., condenser, (P.), B., 812.
- Skljarenko, S. I., and Pakschver, A. [with Gelikonova, O.], action of nitro-cellulose solutions on constructional materials [e.g., metals, rubber], B., 417.
- and Virski, J. P., preparation of cerium by electrolysis of its fused salts, A., 942.
- Sklovski, M. See Angelopulo, K.
- Skobelzyn, D., and Stepanova, (Miss) E., production of positive electrons by β -rays, A., 425.
- Skogmark, J., and Chase, M. F., purification of [hot] gases, (P.), B., 5.
- Skogsberg, T. See Carter, N. M.
- Skogstrom, J. A., simple test for chlorophyll in tallow, B., 276.
- Skokov, M. F. See Kurtschatov, P. A.
- Skopintzev, B. A., determination of oxidisability of waters rich in chlorides, B., 336.
- Skorcheletti, V. V., and Idelchik, B. M., chemical stability of metallic solid solutions, A., 1066.

- Skorcheletti, V. V., and Shultin, A. I., preparation of cupola cast iron alloyed with tin and copper, B., 853.
- Skorupska, L. See Krause, Alfons.
- Skovholt, O., and Bailey, C. H., free and bound water in bread doughs, B., 1018. Effect of mixing and fermentation on protein structure and colloidal properties of doughs, B., 1018.
- Skow, R. E., Ballou, V., McLaughlin, H. L., and Nat. Pure Water Corp., apparatus for distillation of liquids such as water, (P.), B., 388.
- Skow, R. K. See Schmitt, F. O.
- Skowron, S., and Peraus, A., does folliculin provoke interruption of gestation by arrest of the function of the corpus luteum? A., 1034.
- Skrabal, A., unstable intermediate products and classical chemical mechanics, A., 39. Thermodynamic problem, A., 446. Reaction cycles, A., 707. Chemical induction, A., 1328.
- and Schreiner, H., reduction velocity of chloric and bromic acids, A., 452.
- Škramovský, S., influence of dehydration products on the course of dehydration, A., 587. Determination of ammonia, A., 1092. Effect of dehydrated product on course of dehydration, A., 1471.
- Skrinnikov, J. A. See Malinowski, A. E.
- Skript, G. See Monzer, A.
- Skrunnikov, Z. V., and Erlikh, B., refining of lubricating oils, B., 1032.
- Skuderna, A. W. See Hurst, L. A.
- Skuja, J., plant secretions, A., 1172.
- Skulmowski, J. See Marchlewski, L.
- Skuratov, S. M. See Popov, M. M.
- Skutl, V., changes in vapour pressure of lignitic brown coal with rising temperature, B., 659.
- Skvortzov, V. N., indicator transformations of malachite-green in strongly alkaline solutions, A., 462. Oxidation and reduction reactions of colloiddally dissolved substances. III. Reduction of colloidal manganese dioxide, A., 1208. Volumetric determination of sulphate and barium ions, A., 1472. Volumetric determination of aluminium, $p_H > 10$, A., 1474.
- Slabowski, G. I. See Kukolev, G. V.
- Slack, A. D. See Eastman Kodak Co.
- Slack, F. G., Verdet constant of heavy water, A., 148.
- and Peoples, J. A., jun., magneto-optic method of chemical analysis, A., 1342.
- Slade, R. E. See Imperial Chem. Industries.
- Sládek, J., and Lipschütz, M., polarographic studies with the dropping mercury cathode. XLIII. Specific effects of amino-acids, A., 376.
- Sawczycka, S., and Lipschütz, M., chemical decomposition and characteristics of the substances employed in the therapy of pernicious anaemia, A., 1525.
- Sladović, L. See Pushin, N. A.
- Slagle, E. A., and Amer. Smelting & Refining Co., chemical [heat-proofing] treatment of [woollen filter-bag] fabrics, (P.), B., 19.
- Slanina, F. See Bernhauer, K.
- Slanina, S. J., Sowa, F. J., and Nieuwland, J. A., organic reactions with boron fluoride. X. Condensation of propylene with aromatic hydrocarbons, A., 1358.
- Slater, C. S. See Middleton, H. E.
- Slater, G. S., and Byers, H. G., base-exchange and related properties of colloids of soils from erosion experimental stations, B., 421.
- Slater, I. G. See Hanson, D.
- Slater, J. C., and Krutter, H. M., Thomas-Fermi method for metals, A., 679.
- Slater, L. See Sinnatt, F. S., and Walker, J. J.
- Slater, R. H. See Lynch, G. R.
- Slatineanu, A., Balteanu, I., Sibi, M., Butescu, E., and Paraschivescu, Z., relation between acetonuria and hepatic insufficiency in scarlatina, A., 776.
- Balteanu, I., Sibi, M., Franke, M., Veit, E., and Filden, P., acetonuria in infectious diseases in relation to glycogen insufficiency of the liver, A., 775.
- Slatov, B. See Sokolik, A.
- Slaviero, A., fluorine poisoning, A., 1022.
- Slavin, H. B. See Pommerenke, W. T.
- Slawik, P. See Kasper, E.
- Slawinski, A., comparison of centrifugation with electrical conductivity method for determination of volume of blood-corpuscles, A., 372.
- See also Raszeja, S.
- Slawinski, K., and Zacharewicz, W., rupture of the four-carbon ring of pinene glycol, A., 349.
- Slayter, G., and Owens-Illinois Glass Co., porous refractory material, (P.), B., 546.
- Ślebodziński, T., exchange of a halogen atom in the aromatic ring for a nitrile group under the influence of nickel cyanide, A., 1121.
- See also Pawlikowski, T.
- Slee, F. J., laboratory testing of lubricants, B., 935.
- Sleeman, O., [apparatus for] manufacture of malt, (P.), B., 824.
- Slezák, J. See Schneider, J. Z.
- Slidell, K. See Wyatt, E. M.
- Slipher, V. M. See Adel, A.
- Sliva, B. See Čupr, V.
- Slizkovskaja, O. A. See Beskov, S. D.
- Sloan, A. W., and Goodrich Co., B. F., rubber compositions and methods of preserving rubber, (P.), B., 817.
- Sloan, C. B., centrifugal ore separator, (P.), B., 786.
- Sloan, D. H., high-voltage vacuum tube, A., 59. Radio-frequency high-voltage generator, A., 321.
- See also Coates, W. M.
- Sloan, W. A., and Davis, Charles W., hydrometallurgy of copper sulphide ores and its relation to mineral structure, B., 499.
- Sloane, R. G. See Standard Oil Development Co.
- Sloane, R. W., ignition of gaseous mixtures by the corona discharge, A., 708.
- Slobodin, J. M., isomerisation of allene hydrocarbons by silicates. I. Isomerisation of asymmetric dimethylallene in presence of floridin. II. Isomerisation of $Z^{\alpha\beta}$ -butadiene in presence of floridin, A., 62, 957. Comparison of polymerising and adsorptive powers of silicates, A., 942.
- Sloan, H. A., sixth report on the heterogeneity of steel ingots. IV. Critical examination of the "vacuum-fusion" method for determination of total oxygen in steel, B., 994.
- Slonim, C., decomposition of bauxite by sodium sulphate, B., 493.
- Slooff, G. See Böeseken, J.
- Slosson, H. D. See Odeen, H.
- Slotta, K. H., [sulphite liquor lactone and tsugarsinol], A., 754.
- and Behnisch, R., hydrocupreine amino-alkyl ethers, A., 874.
- and Blanke, E., method of microhydrogenation, A., 862.
- and Ruschig, H., corpus luteum hormone. I. and II., A., 129.
- Ruschig, H., and Blanke, E. [with Neuhaus, A.], preparation of homogeneous hormones from the corpus luteum. III. Constitution of luteosterone-C and -D, A., 128.
- and Szyszka, G. [with Heller, H.], β -phenylethylamines. IV. Preparation of β -aminophenylethylamines, A., 337.
- See also Allen, W. M.
- Slubicki, Z. See Żeromski, S.
- Sluchowski, S. I. See Kobosev, N. I.
- Slutzkaja, M. M. See Brodski, A. I.
- Slutzkin, A. A., Braude, S. I., and Vigdor-chik, I. M., production of ion currents in high vacuum with the aid of a magnetic field, A., 677.
- Slutzkin, A. B. See Golub, G. L.
- Sluiter, H. See Stather, F.
- Sly, G. E. See Bowen, B. D.
- Smagina, A. S. See Starik, I. E.
- Smakula, A., determination of mol. wt. of polystyrenes, A., 74. Optical investigation of antineuritic vitamin ($-B_1$), A., 261. Velocity of migration of electrons in alkali halide crystals, A., 557.
- See also Hauser, K. W.
- Small, J. D. See Jones, C. L.
- Small, L., and Faris, B. F., reduction studies in the morphine series. VI. Hydrogenation of α - and β -isomorphines, A., 505.
- and Lutz, R. E., reduction studies in the morphine series. V. Dihydro- and tetrahydro- ψ -codeine methyl ethers, A., 505.
- See also Lutz, R. E.
- Small, L. F., morphine derivative [dihydro-deoxymorphine-D], (P.), B., 974.
- Small, T., prevention of blight (*Phytophthora infestans*) in seed potatoes, B., 691.
- Smallwood, W. C. See Hickmans, E. M.
- Smart, W. A. M. See Cunningham, J. T.
- Smead, E. L., preparation for cleaning, preventing, or removing scale or stains from articles, (P.), B., 755.
- Smeets, C., determination of perchlorates, A., 183. Perchlorates. III. Barium ammine perchlorates, A., 1213.
- Smekal, A., theory of real crystals, A., 151. Use of model substances for investigation of metal mechanics, A., 154. [Theory of practical strength], A., 288. Translation conditions, A., 288.
- Smerdov, N., rationalisation of tanning with vegetable tannides, B., 686.
- Smethurst, A. F., anomalies in determination of water in epidote, A., 1344.
- Smialowski, M., effect of alternating currents on corrosion of metals in aqueous solutions, B., 502.
- Smidovich, E. See Obryadchikov, S. N.
- Smith & Co., F. L. See Vogel-Jørgensen, M.
- Smiles, S. See Evans, W. J., Galbraith, F., and Wight, C. F.
- Smiragin, A. P., and Belova, A. V., copper-beryllium alloys, B., 458.
- Smirk, F. H., chloride and urea excretion as a measure of functional activity of healthy and diseased kidneys, A., 518.

- Smirnov, A. I., development of sugar-beet in first year of growth, A., 131.
See also Ljalikov, K. S.
- Smirnov, A. P., determination of inositol, A., 1390. Extraction of inositol from tobacco, A., 1550.
See also Schmuck, A.
- Smirnov, A. S. See Isgarishev, N. A.
- Smirnov, A. T. See Schorigin, P. P.
- Smirnov, B. See Oparina, M. P.
- Smirnov, D. I. See Augustinik, A. N.
- Smirnov, D. N., Koruitov, S. I., and Nemkin, A. S., drying resin soap by atomisation, B., 814.
- Smirnov, L. V., validity of Rayleigh's formula for colloid systems, A., 932.
- Smirnov, N. P., stimulus to precipitate formation, A., 1328.
- Smirnov, N. V., determining strength of lacquer and oil films, B., 319.
- Smirnov, V. S., determination of lignin and cellulose in the same sample of plant product, B., 398.
- Smirnova, A. See Obrutzki, G.
- Smirnova, A. I. See Fedorov, B. P.
- Smirnova, M. A. See Ivanov, N. N.
- Smirnova, O. F. See Okhotin, V. V.
- Smit, A. J. H., auxins, A., 1039.
- Smit, B., protection of hides and skins from ravages of the skin beetle, *Dermestes valpinus*, B., 1007.
- Smit, J., bulking of activated [sewage] sludge. II. Causative organisms, B., 208.
- Smit, P., decolorisation of oils and fats, B., 158. Glucose, B., 1064.
- Smit, R., and Peper, J. P., correlation between the quality of wool and the calcium and sodium content, B., 843.
- Smith, A. D., and Jenkins Petroleum Process Co., increasing the octane number of liquid hydrocarbon motor fuels, (P.), B., 1035.
- Smith, A. H., and Smith, P. K., inorganic salts in nutrition. X. Electrolyte balance in serum of rats receiving a diet deficient in inorganic constituents, A., 243.
See also Light, A. E., Smith, P. K., and Swanson, P. P.
- Smith, A. M., increase in protein content of oats obtained by delaying application of nitrogen, B., 244.
- Smith, A. S., thermal conductivity apparatus for continuous determination of helium content of natural gas, B., 186. Rate of mixing of gases in closed containers, B., 578.
- Smith, B. F. See Kress, O.
- Smith, C. See Mrak, E.
- Smith, C. E., and Duplate Corp., apparatus for use with acid cleaning equipment, (P.), B., 1051.
- Smith, C. J. See Hilditch, T. P., Koppers Co. of Delaware, and Thor, C. J. B.
- Smith, C. M., calcium chloroarsenate, A., 1469.
See also Williams, Ltd., H.
- Smith, C. R., occurrence of anabasine in *Nicotiana glauca*, R. Gralh. (Solanaceae), A., 905.
- Smith, C. S., magnetic susceptibility of some alloys of "γ-brass" structure, A., 1314.
See also Lorig, C. H.
- Smith, C. W. See Roberts, A. A.
- Smith, Charles W., paper making, (P.), B., 223.
- Smith, D. M., use of spectrograph in metallurgical analysis, B., 272. Spectrographic analysis of aluminium, B., 553.
- and Bryant, W. M. D., rapid determination of hydroxyl by acetyl chloride and pyridine, A., 369. Titrimetric determination of water in organic liquids using acetyl chloride and pyridine, A., 835.
See also Bryant, W. M. D.
- Smith, D. P., and Derge, G. J., rôle of intergranular fissures in occlusion and evolution of hydrogen by palladium, A., 159.
- Smith, E. See Williams, I. R.
- Smith, E. A., deposits and corrosion in cooling system of internal-combustion engines, B., 212.
- Smith, Erna A. See Mack, L.
- Smith, E. A. C. See under Guggenheim Bros.
- Smith, E. C., cold storage of poultry. I. Gas storage of chickens, B., 77.
- Smith, Edgar C., approximate determination of proteins of muscle, A., 231.
- Smith, E. C. B., proteins of meat, B., 571.
See also Moss, S. A., jun.
- Smith, E. C. W. See Lunt, R. W.
- Smith, E. F., aniline dyes when used as stains [for wood], B., 1004.
- Smith, E. K. See Edwards, D. V.
- Smith, E. R., and Wojciechowski, M., fractionation of the isotopes of oxygen in a commercial electrolyser, A., 1329.
See also Washburn, E. W.
- Smith, E. R. B., effect of variations in ionic strength on the apparent isoelectric point of ovalbumin, A., 301.
See also Ferguson, J. H.
- Smith, E. S., seasonal cycle of nitrogenous and carbohydrate materials in fruit trees. II. Cycles of alcohol-soluble materials and of carbohydrate fractions and lignin in wood, bark, leaves, and portions of terminal shoots of apple trees under two cultural systems—grass plus annual spring nitrate, and arable without nitrogenous fertiliser, A., 264.
- Smith, Edward W., and Electric Storage Battery Co., storage-battery separators, (P.), B., 108.
- Smith, Ernest W. See Hodgson, H. H.
- Smith, F., [destruction of water-hyacinth], B., 247.
- Smith, F. A. See Washburn, E. W.
- Smith, F. B., and Brown, P. E., decomposition of straw in production of artificial manure, B., 514. Oxygen absorption and carbon dioxide production in soils, B., 1010.
and Dean, Hartzell C., effects of fertilisation on nitrification in high-lime soils, B., 1010.
and Dean, Harold L., effect of lime on availability of phosphate in Tama silt loam, B., 1010.
See also Brown, P. E., Dean, Hartzell C., Dean, Harold L., and Killinger, G. B.
- Smith, F. C. See Densham, A. B.
- Smith, Frank C. See Holiday, E. R.
- Smith, F. F., control of certain *Tarsonemus* mites on ornamentals, B., 778.
- Smith, F. H. See Telegraph Construction & Maintenance Co.
- Smith, F. L. See Wilkins, E. S., jun.
- Smith, F. R. See Mudge, C. S.
- Smith, Franklin S., [conditioning] treatment of tobacco, etc., (P.), B., 125. [Electrical] apparatus for sterilising, (P.), B., 316.
- Smith, Frederick S. See Ritchie, G. W.
- Smith, G., coating of surfaces, and manufacture of coated or compound [sheet] materials, (P.), B., 448.
- Smith, George. See Raistrick, H.
- Smith, G. B. L. See Whitmore, W. F.
- Smith, G. D. See Jenny, H.
- Smith, G. Frederick, and Hardy, I. R., preparation of anhydrous perchlorates of magnesium and alkaline-earth metals by reactions between solids, A., 832.
- McVickers, L. D., and Sullivan, F. R., mixed perchloric and sulphuric acids. III. Determination of chromium in chromic oxide, A., 1474.
and Smith, G. P., determination of chromium in stainless steel using perchloric, phosphoric, and sulphuric acids, B., 807.
and Sullivan, F. R., determination of chromium in chrome-tanned leather; nitric, perchloric, and sulphuric acids as oxidant for organic matter and chromium, B., 1008. Volumetric determination of iron in leather; wet oxidation of organic matter, using mixed nitric, perchloric, and sulphuric acids, and titration of iron, using titanous chloride, B., 1058.
- Smith, Gilbert F., heats of activation of acetone-iodine reaction, A., 43.
and Koch, E. G., alkaline-earth metal ammine perchlorates, A., 832.
- Smith, G. P. See Smith, G. Frederick.
- Smith, G. S., colour reactions of carbazides and carbamides with diacetyl and diacetyldioxime, A., 609.
- Smith, G. van S., and Smith, O. W., comparatively low levels of oestrin in cases of chorioepithelioma and hydatidiform mole, A., 1425.
See also Chew, W. B.
- Smith, H., toluene regulators, A., 598.
- Smith, Harold. See Dunlop Rubber Co.
- Smith, Henry, thyroid extract in prostate swelling, A., 410.
- Smith, H. A. See Clark, George L.
- Smith, Hilton A., and Kistiakowski, G. B., photochemical hydrogen-oxygen reaction, A., 831.
and Vaughan, W. E., ethane-ethylene-hydrogen equilibrium, A., 934.
See also Kistiakowski, G. B.
- Smith, H. B. See Eastman Kodak Co.
- Smith, H. C., and Coast Insulating Co., acoustical material, (P.), B., 357.
- Smith, H. E., corrosion of iron and steel; report of Committee A-5, B., 1048.
- Smith, H. Grayson, and Craddock, R. H., absorption spectrum of rhombic sulphur in polarised light, A., 136.
See also Burton, E. F.
- Smith, H. Gregg, and Seegers, W. H., rôle of liver in growth, reproduction, and lactation, A., 1404.
See also Kochenderfer, E. W., and McCreary, E. J.
- Smith, Herschel G., and Gulf Refining Co., dewaxing of lubricating oils, (P.), B., 1035.
- Smith, H. M., and Rall, H. T., treatment of hydrocarbons, (P.), B., 296.
- Smith, H. R., permanent aqueous microscopic mounts, A., 1098.
- Smith, H. V., determination of fluorine in drinking-water, A., 316. Potability of water from the viewpoint of fluorine content, B., 608.
See also Smith, Margaret C.

- Smith, H. W. [with Faranacci, N., and Breitweiser, A.], metabolism of the lung-fish. I. Fasting metabolism in active fish, A., 1013.
- Smith, (Miss) I. A., (-)phenylmethoxy-acetonitrile, A., 488.
- Smith, J. A. B. See Irving, B.
- Smith, J. C., and Harris, P. L., addition of hydrogen bromide to olefines, A., 324.
- See also Harris, P. L., and Harris, R. M.
- Smith, J. E. See Lenher, S.
- Smith, J. I., rapid methods for [sewage] sludge solids determination, B., 80.
- Smith, J. K., and Beryllium Corp., beryllium-aluminium alloys, (P.), B., 66.
- Spring steel, (P.), B., 155. Steel for nitriding, (P.), B., 155.
- Smith, K. J., and Skelly Oil Co., refining of cracked gasoline, (P.), B., 617.
- Smith, K. K., and Hedenburg, N. A., comparison of theoretical and measured Hall coefficients, A., 1452.
- Smith, K. M., problem of a plant virus infection, A., 1551.
- Smith, L. B. See Du Pont de Nemours & Co., E. I.
- Smith, L. E., and LaForge, F. B., rotenone. XXXI. Synthesis of 2-hydroxy-4:5-dimethoxyphenylacetic acid, A., 83.
- See also Campbell, F. L., and McBain, J. W.
- Smith, L. I., and Hanson, L. I., addition of magnesium methyl iodide to benzylidenepropiophenone, A., 1125.
- and Harris, S. A., polymethylbenzenes. XI. Nitration of pentamethyl-, hexamethyl-, and hexaethyl-benzene, A., 1114.
- and Tenenbaum, D., polymethylbenzenes. XII. Nitration of bromodurene and structure of the "dinitrodiroyl bromide" of Willstätter and Kubli, A., 1114.
- Smith, L. T. See Hercules Powder Co.
- Smith, M. A. See Lowry, C. D., jun.
- Smith, M. A. See Roberts, J. W.
- Smith, Margaret C., and Smith, H. I., mottled enamel of deciduous teeth, A., 531.
- See also Lantz, E. M.
- Smith, Marsden C., fluorine toxicosis, A., 1022. Review of status of ammonia-chlorine process [for water purification], B., 128.
- Smith, M. D., and Moloney, P. J., detoxifying action of ox-bile, A., 648.
- Smith, M. E., effect of vitamin-A deficiency on the concentration of blood-lipins of albino rats, A., 415.
- Smith, M. I., and Stohman, E. F., influence of vitamin-B₂ on haematopoiesis in experimental anaemia in the albino rat, A., 1019.
- Smith, M. L. See Topley, B.
- Smith, N. See Morgan, R.
- Smith, N. H. See Mouzon, J. C.
- Smith, N. R. See Irving, G. W., jun.
- Smith, O. A., antiseptic value of zinc and other pigments toward paper stocks, B., 184.
- Smith, O. H., and Naugatuck Chem. Co., coating material, (P.), B., 815.
- Smith, O. M., ferric chloride in sewage treatment, B., 255.
- and Blair, H., direct colorimetric determination of sodium, A., 185.
- Smith, O. W. See Chew, W. B., and Smith, G. Van S.
- Smith, P. K., and Smith, A. H., electrolytes in the serum of the rat, A., 230.
- See also Light, A. E., and Smith, A. H.
- Smith, P. T., Lozier, W. W., and Bleakney, W., automatic recording mass spectrograph, A., 1342.
- See also Lozier, W. W., and Tate, J. T.
- Smith, P. W., oxygen consumption in muscle activity in relation to fibre length, A., 1529.
- Smith, R. A., effect of exchange on polarisation of electrons by double scattering, A., 274. Capture of electrons by positive ions from neutral gas atoms, A., 274. Application of wave mechanics to reactions involving hydrogen and diplogen, A., 306. Apparatus for thermal decomposition of small quantities of materials in an inert atmosphere, A., 1096.
- Smith, R. B., and Sinclair Refining Co., recovery of hydrocarbons, (P.), B., 11.
- Smith, R. C., and Howard, H. C., equivalent and mol. wts. of humic acids from a bituminous coal, B., 534.
- Smith, R. G., phenanthrene derivatives. IV. Veratrine-like action on skeletal muscle, A., 1019.
- Smith, R. W., and Duffendack, O. S., conductivity produced in neon and helium by irradiation with their own resonance radiations and the effect of foreign gases on this conductivity, A., 566.
- See also Duffendack, O. S.
- Smith, S., and George, Ltd., W. & J., model for demonstration of crystal forms, etc., (P.), B., 659.
- Smith, Sinclair. See Leighton, P. A.
- Smith, Stanley, and Beggs, J. S., interferometer measurements of the hyperfine structure of some lines of singly ionised bismuth, A., 1184.
- Smith, Sydney, Digitalis glucosides. IV. Existence of two anhydrodigitoxigenins. V. Constitution of digitoxigenin, A., 1226, 1355.
- and Timmis, G. M., new alkaloid of ergot, A., 1256.
- See also Lamb, I. D.
- Smith, S. N., response of inbred lines and crosses in maize to variations of nitrogen and phosphorus supplied as nutrients, B., 166.
- Smith, S. S. See Shell Development Co.
- Smith, T. O. See Phillips, T. G.
- Smith, T. T., life tests of commercial type standard cells, A., 188.
- Smith, W. See Evers, N.
- Smith, W. A. See Hoyt, L. F.
- Smith, W. Alvah, refining of hydrocarbon materials, (P.), B., 394.
- Smith, W. E., vacuum-pan design and operation [for sugar-boiling], B., 201. Conductivity control of vacuum-pan [sugar]-boiling, B., 201. Mechanical circulation in vacuum pans [for sugar-boiling], B., 473.
- Smith, W. F. See Imperial Chem. Industries.
- Smith, W. H. (Washington), and Holt, W. L., vulcanisation and stress-strain behaviour of sol, gel, and total rubber hydrocarbon, B., 196.
- and Saytor, C. P., ether-insoluble or gel rubber hydrocarbon: its solution, crystallisation, and properties, B., 196.
- Smith, William Henry, and Gen. Reduction Corp., reduction and alloying of metals [to make chromium steel], (P.), B., 461.
- Smith, W. O., sorption in an ideal soil, A., 1316. Structure of rigid gels, such as that of silicic acid, A., 1320.
- Smith, W. P. See Automotive Products Co.
- Smith, Walter R. See Kistiakowski, G. B.
- Smith, William R. See Roper, E. E.
- Smith & Co., Ltd., H. V. See Miller, Walter Leslie.
- Smith Corporation, A. O. See Archer, R. S., Bruins, P. F., Gudmundsen, A., Walker, W. O., and Ziska, A.
- Smith Engineering Works. See Rumpel, H. H.
- Smithells, C. J., and Ransley, C. E., diffusion of gases through metals, A., 25. Diffusion of hydrogen through aluminium, A., 692.
- See also McLennan, J. C.
- Smithson, F., recovery of bromoform [in heavy-mineral separation], B., 501.
- Smithson, W., casting of metals, alloys, and other molten materials, (P.), B., 772.
- Smithuysen, W. C. B. See Shell Development Co.
- Smits, A., inner equilibria in solid phases. II. and III., A., 16, 811. Intensive drying, A., 451. Delayed ionic discharge as cause of hydrogen over-voltage and of cathodic polarisation generally, A., 707.
- and Cannegieter, D., direct determination of heat of condensation. II. Experiments with intensively dried liquids, A., 436. Effect of intensive drying on establishment of inner equilibrium. III., A., 437.
- Smits, C., manuring of newly cultivated soils. VI. Holland, B., 515.
- Smittenberg, J., absorption and adsorption of hydrogen by nickel, A., 27.
- Smola, A., absorption process for preparing carbon dioxide, B., 21.
- Smolenski, K., and Ero, W., properties of activated charcoals, B., 660.
- and Kowalewski, S., combustible liquid obtained from ethylene, A., 191. Pyrogenic transformations of ethyl alcohol, A., 193.
- and Kozłowski, W., influence of sucrose on p_H of alkaline solutions, A., 170. Influence of sucrose on the p_H of alkaline solutions, B., 1064.
- and Pietrzykowski, T., conductometric determination of ash in crude beet juice, B., 1063.
- and Zaleski, J., chemical composition and productive value of sugar beets, B., 200.
- and Zelazny, A., velocity of crystallisation of sucrose, A., 159; B., 75.
- and Zlotnik, A., reduction of galacturonic acid and of methyl methylgalacturonate, A., 196.
- Smolik, J., electrolysable potassium and phosphorus [in soils] and Neubauer's method, B., 244. Structure and moisture condition of soils, B., 645. Volume of the settled suspension of soil in water, B., 645. Redox potential in soil, B., 646. Comparison of Truog's extraction method and dialysis for [determining] phosphate in soils, B., 865.
- Smoljaninova, E. K. See Sehorigin, P. P.
- Smoluchowski, R., fine structure of X-ray absorption edges of alloys. I. γ -Alloys. II. CuBe, NiO, and AuCu₂ (statistic and ordered phases), A., 812, 1194.
- See also Coster, D.

- Smorodincev, I. A., and Bebeschin, K. V., chemistry of helminths. II. Chemical composition of *Taenia saginata*, A., 646.
- and Krilova, N. N., changes in acid-base coefficient of meat during storage, A., 105. Albumose and peptone content of the muscle of horned cattle, A., 1522.
- and Pavlov, S., determining the quality of raw hides, B., 817.
- and Philippova, L. A., acid-alkali equilibrium and acid-base coefficient, A., 404.
- Smrž, R. See Abel, E.
- Smuts, D. B., relation between basal metabolism and endogenous nitrogen metabolism with particular reference to the determination of maintenance requirement of protein, A., 1271.
- Smyth, C. P., and McAlpine, K. B., moments and internal potential energies of two molecules containing movable dipoles, A., 916. Constancy of two dipole moments in the vapour state and their apparent variation in solution, A., 916.
- and Walls, W. S., dielectric investigations of nitromethane and chloropierin, A., 1304.
- See also De Bruyne, J. M. A., Hnettig, H., jun., and McAlpine, K. B.
- Smyth, D. H., water-soluble choline precursor in the human placenta, A., 1265.
- Smyth, H. D., emission and fluorescence spectra of sulphur dioxide, A., 144.
- Smythe, C. V. See Michaelis, L., and Reiner, L.
- Smythe, J. A. See Hawkes, L.
- Snapp, O. I., and Thomson, J. R., control of the peach borer on nursery stock and orchard trees, B., 247.
- Snell, F. D., treatment of trade waste with activated carbon, B., 832. Acid- and water-proof cement, (P.), B., 632.
- and Essex Foundry, [foundry] mould, (P.), B., 105.
- and Travatex Products Corp., plastic [artificial stone], (P.), B., 409.
- See also Biffen, F. M.
- Snell, H., Stark effect in the molecular spectrum of hydrogen, A., 555.
- Snell, J. F. See Skazin, L.
- Snell, M. E. See Beaumont, A. B.
- Suessarev, A. P., rapid spectroscopic determination of metals. I. Lithium, A., 185.
- Rosanov, N. N., and Assoskov, P. J., rapid spectroscopic determination of metals. II. Comparator for the intensity of spectrum lines, A., 947.
- Sneath, H. C. S., laboratory fractionating column, A., 724. Activity of sulphuric acid in the oxidation of organic substances with chromic acid, A., 1140. Titrimetric determination of organic substances by oxidation with chromic acid, A., 1390.
- Snider, H. J., solubility of phosphorus in soils from some Illinois experiment fields, B., 199. Chemistry of soil under long-continued field experiments, B., 325.
- and Hein, M. A., influence of soil treatment on composition of sweet clover, B., 166.
- See also Giesecking, J. E.
- Snider, R. H. See Bloor, W. R.
- Sniffin, J. G., and McLaughlin, J. W., separator [for solids from liquid mud], (P.), B., 787.
- Snijders, C. J., jun., and Drift, A. J. W. van der, determination of small quantities of arsenic, A., 718.
- Snitkin, N., rapid freezing of liquids, (P.), B., 532.
- Snoddy, L. B., Allison magneto-optic effect, A., 149.
- See also Beams, J. W., and Bradley, C. D.
- Snoek, J. L., connexion between rotatory and translatory viscosity, A., 22. Magnetic investigations of electromagnet cores of a new type, A., 687.
- See also Burgers, W. G.
- Snow, C. P., and Eastwood, E., sources of error in absorption spectroscopy, A., 320.
- See also Eastwood, E.
- Snow, H. R. See Standard Oil Co.
- Snow, L. M., bacterial flora of wind-blown soil. IV. Shackleford Bank, N. Carolina. V. Monterey peninsula, California. VI. Death Valley, California, with summary of six soil studies, B., 470, 964.
- Snow, R., activation of cambial growth by pure hormones, A., 905.
- and Le Fanu, B., activation of cambial growth, A., 418.
- Snyder, C., and Angola Chem. Corp., adhesives and surfacing materials, (P.), B., 371.
- Snyder, C. J. See Bassett, W. H., jun.
- Snyder, E. F., determination of the pH of soils, B., 777.
- Snyder, F. H., and Snyder, Inc., F. H., purification of bast fibres, (P.), B., 1040.
- and Snyder Maclaren Processes, Inc., recovery of fibre from waste paper, (P.), B., 1139.
- Snyder, F. M. See Searls, E. M.
- Snyder, J. C. See Whitelaw, G. P.
- Snyder, J. W. See Wiegand, W. B.
- Snyder, L. J. See Shell Development Co.
- Snyder, R. M. See Tranin, S.
- Snyder, Inc., F. H. See Snyder, F. H.
- Snyder Maclaren Processes, Inc. See Snyder, F. H.
- Soare, A. G., and Georgescu, R., comparative tests on preparation of active carbon from beechwood, B., 707. Comparative tests on preparation of active carbon from various woods, B., 707. Comparative tests on preparation of active carbon from lignite and anthracite by impregnation with various chemicals, B., 707. Activated carbon obtained by repeated activation, B., 707.
- See also Ionescu, T. D.
- Soash, E. G., bonding strength of babbitt to steel and bronze, B., 152.
- Sobel, A. E., Goldfarb, A. R., and Kramer, B., incurable rickets. II. Role of the "local factor" and of viosterol in pathogenesis of rickets due to beryllium, A., 518.
- See also Natelson, S.
- Sobieraj, Z. See Lachs, H., and Zawadzki, J.
- Sobolev, B. N. See Chernov, G. I.
- Sobolev, I. A. See Kagan, M. J.
- Sobolevskaja, O. J., and Turetzkaja, R. C., dynamics of metabolism during the ripening process of the red currant, A., 795.
- Soboliev, M. N., vanadium problem in the Urals, B., 191.
- Soboliev, M. N., and Vuilegzhani, B. M., extraction of vanadium from basic open-hearth slags, B., 409.
- Sobotka, M., Halden, W., and Bilger, F., fat and lipid metabolism of yeast. IV. Accumulation of sterols and fat in bottom yeast, A., 1165.
- Sobue, H., hydration of fibres. IV. Fluctuation of fibre length with changes in atmospheric humidity, B., 183. Hydromechanics of viscose and mechanism of coagulation of viscose in the spinning process. IV. Mechanism of coagulation and spinnability of viscose, B., 1136.
- and Hirano, Y., chemical treatment of wool fibres. III. Treatment analogous to hypochlorite chlorination, B., 16.
- Socfin Co., Ltd., drying, with or without smoking, of rubber sheets, (P.), B., 512.
- Società Anonima Carburanti Italia, anti-detonating fuel for internal-combustion engines by heat treatment of mixtures of alcohols and oils, (P.), B., 216.
- and Livraghi, E., transformation of mixtures of alcohols and fatty or aromatic hydrocarbons into highly anti-knock economical fuels for internal-combustion engines, (P.), B., 937.
- Soc. Anon. Prodote Salpa & Affini (S.A.P.S.A.). See Internat. Latex Processes.
- Soc. Italiana Pirelli, refractory materials and materials possessing heat- and sound-insulating properties, (P.), B., 25. Paving, floor, and similar surface-covering materials composed of soft or hard rubber, (P.), B., 150. Apparatus for degasifying liquids, (P.), B., 258. Plastic masses containing rubber, (P.), B., 368. Filtering masses for removing aerosols and similar fine suspended matter from the atmosphere, (P.), B., 930, 1027. Glossy ebonite articles, (P.), B., 963. Softening of raw rubber and compositions thereof, (P.), B., 1104.
- and Faldini, M., rubber articles from aqueous rubber dispersions, (P.), B., 369.
- and Pestalozza, U., rubber articles from aqueous rubber dispersions, (P.), B., 369.
- See also Pestalozza, U.
- Soc. Ital. Rueping per l'Iniezione del Legname, antiseptic fireproofing preparations [for wood, etc.], (P.), B., 497.
- Société Alfa-Laval, clarification of viscose, (P.), B., 58.
- Soc. Anonyme Anciens Établissements A. Savy Jeanjean & Co. See Harber, L. S., and Tunley, A. A.
- Soc. Anon. pour les Applications de l'Électricité & des Gas Rares Établissements Claude-Paz & Silva, filling of gas-filled electric incandescence lamps, (P.), B., 158.
- Soc. Anon. le Carbone, [electrolyte for] electric batteries, (P.), B., 67.
- Soc. Anon. des Manufactures des Glaces & Produits Chimiques de St.-Gobain, Chauny & Cirey, vitreous compositions with mica base, (P.), B., 149. Thermal treatment of materials easily oxidisable under heat, (P.), B., 210. Wholly-crystalline refractories from zircon by fusion, (P.), B., 805. Electric furnaces, (P.), B., 811. Cellular glass, (P.), B., 949. Tempering of plates or sheets of glass, (P.), B., 1044.

- Soc. Anon. d'Ougrée Marhay, industrial extraction of constituents of natural and artificial silica compounds, (P.), B., 355. Treatment of benzols, petrols, and other hydrocarbons, (P.), B., 1083.
- Soc. Anon. "Produits Chimiques & Engrais L. Bernard," and Goormaghtigh, G., production of soluble fertilisers from tricalcium phosphate, (P.), B., 517.
- Soc. Anon. des Produits Réfractaires & Céramiques du Nord, compressed refractory materials, (P.), B., 993.
- Soc. Ateliers Neyret Beylier. See under Ateliers Neyret Beylier.
- Soc. Carbochimique, Soc. Anon., ethylene glycol from dichloroethane, (P.), B., 395.
- Soc. de Carbonisation de Molières-sur-Ceze, carbonisation of fuel briquettes, (P.), B., 393.
- Soc. des Ciments du Congo, cement, (P.), B., 229.
- Soc. des Ciments français & des Portland de Boulogne-sur-Mer & Compagnie des Portland de Desvres, cement, (P.), B., 950.
- Soc. d'Électro-Chimie, d'Électrometallurgie des Aciéries Électriques d'Ugine, [ferro-alloys poor in oxygen, (P.), B., 66. Deoxidation of steel, (P.), B., 503. Acid slags for deoxidising steel, (P.), B., 503. Iron alloys of very low carbon content, (P.), B., 504. Deoxidation of copper, (P.), B., 504. Steel, (P.), B., 679. Dephosphorisation of steel, (P.), B., 772. Deoxidation and purification of copper, (P.), B., 956. Iron alloys, (P.), B., 998. Purification of nickel, (P.), B., 999.
- Soc. des Établissements Barbet, apparatus for continuous distillation and rectification of musts containing acetone, ethyl alcohol, and butyl alcohol, (P.), B., 170.
- Soc. l'Études Chimiques Appl. (S.E.C.A.). See Hugel, G.
- Soc. d'Étude pour l'Épuration des Eaux "Procédés G. & B.," apparatus for purification of water, (P.), B., 704.
- Soc. d'Études pour la Fabrication & l'Emploi des Engrais Chimie, separation of ammonium chlorido [from alkali salts], (P.), B., 899.
- Soc. d'Exploitation de Ciments Hydrauliques Réfractaires, S.E.C.H.Y.R., building material [refractory hydraulic cement], (P.), B., 951.
- Soc. pour la Fabrication de la Soie Artificielle "Rhodiaseta," treatment with alkaline media of threads, fibres, fabrics, etc., composed of or containing cellulose acetate, (P.), B., 98.
- Soc. Française du Carbonalpha & des ses Dérivés, and Boname, G., carbon black, (P.), B., 661.
- Soc. Franc. de Catalyse Généralisé, othylcno oxide, (P.), B., 839.
- Soc. Générale de Fours à Coke, Systèmes Lecocq Soc. Anon., semi-coke, (P.), B., 537. Processes and coke oven for producing semi-coke in lumps, (P.), B., 981.
- Soc. Industrielle des Carburants & Solvants, purification and hydrogenation of naphthalene, (P.), B., 1133.
- Soc. Industr. de la Cellulose (S.I.D.A.C.). See Gombault, U.
- Soc. Lumière, kinematographic films in natural colours, (P.), B., 702.
- Soc. Lyonnaise de Soie Artificielle, and Cusin, M., individual filter for spinning of artificial filaments, threads, etc., (P.), B., 800.
- Soc. Nobel Français, [vinyl] condensation products, (P.), B., 816.
- Soc. pour le Perfectionnement de la Chaufferie, burning of liquid fuels, (P.), B., 1128.
- Soc. de Recherches & de Perfectionnements Industriels, apparatus for spray evaporation or cooling of liquids and semiliquids, (P.), B., 84. Substances for surfacing of roads, (P.), B., 853. Surfacing of roads, (P.), B., 903.
- Soc. à Responsabilité Limitée les Bactéricides Colloïdaux-Baco, rendering of coating materials bactericidal, (P.), B., 466.
- Soc. des Usines Chimiques Rhône-Poulenc, bases derived from benzodioxan, (P.), B., 124. Sodium aurothiomalate, (P.), B., 287. Safety glass, (P.), B., 725. Manganese dioxide, (P.), B., 948.
- See also Gallay, C. H., and Grillet, N. B.
- Soc. Vallourec, coating of ferrous metals with a corrosion-resisting alloy, (P.), B., 638.
- Soc. des Vernis Pyrolac S.A.R.L., [varnished cardboard] gramophone discs, (P.), B., 988.
- Society of Chemical Industry in Basle, [agents for] treatment of materials in textile, leather, and paper industries, (P.), B., 14. Chromiferous dyes, (P.), B., 15. Printing of animal or cellulosic fibres [with metalliferous dyes], (P.), B., 19. Primary diterpene alcohols, (P.), B., 57. Manufacture and application of products useful as assistants in textile and leather industries, (P.), B., 57. Staple fibre, (P.), B., 96. Dyeings and printings on fibrous material [with ice colours], (P.), B., 98. Printing of cellulosic materials with dyes, (P.), B., 145. Chromiferous azo-dyes, (P.), B., 220, 444, 717, 941, 985, 1080, 1134. Mixed fabrics, (P.), B., 223. Textile assistants, (P.), B., 263. Production of fast tints on the fibre [ice colours], (P.), B., 267. White or coloured matt effects on artificial silk made from regenerated or acetylated cellulose, (P.), B., 304. Isatin-a-halides halogenated in the nucleus, (P.), B., 349. Synthetic [aniline-formaldehyde] resins, (P.), B., 368. [Green] dyes [of the anthraquinone series for wool and acetate silk], (P.), B., 397. Dyeing of acetate artificial silk, (P.), B., 449. Dyeing of leather, (P.), B., 492. Colouring [dyeing] of oxide films on aluminium or on its alloys, (P.), B., 506. Obtaining the hormone of corpus luteum, (P.), B., 524. [Acyl] derivatives of nucleotides, (P.), B., 524. Mixing mills, (P.), B., 532. Mono-[hydr]oxychrysene, (P.), B., 585. Dyeings on the fibre [ice colours], (P.), B., 589. Photographic silver halide emulsion, (P.), B., 607. Dyeing of cellulose acetate artificial silk, (P.), B., 670. Mixed chromiferous azo-dyes, (P.), B., 717. Azo-dyes and intermediate products, (P.), B., 717. Indigoid dyes, (P.), B., 718. Cellulose esters, (P.), B., 720. Discharging of dyeings on wool, (P.), B., 722. Condensation products from unsaturated oils, (P.), B., 737. 4-Arylamino-1-alkylaminoanthraquinones, (P.), B., 762. Sulphurised dyes, (P.), B., 763, 843, 1135.
- Society of Chemical Industry in Basle, intermediato products [pyreno derivatives], (P.), B., 796. Azo-dyes [for acetate silk], (P.), B., 796. Alkylated cyclic amidines, (P.), B., 840. [Aminoanthraquinone] dyes [for acetate silk], (P.), B., 842. Mercerisation, (P.), B., 848. [Resinous] nitrogenous condensation products derived from phenols, (P.), B., 861. Printing of acetate artificial silk, (P.), B., 946. Dyeing of animal fibres, (P.), B., 946. Diazo-preparations, (P.), B., 985. Sulphur dyes which dye deep black shades, (P.), B., 986. Dyeing with direct dyes, (P.), B., 989. Purifying the hormones of the corpus luteum, (P.), B., 1068. Fibrous sheet material having a basis of partly hydrolysed cellulose, (P.), B., 1089. Preparations for improving textiles, (P.), B., 1131. Dry preparations capable of dispersion in water, (P.), B., 1131. Conversion products of N-nitroamines of primary aromatic amines nitrated in the nucleus, (P.), B., 1132. Polynuclear cyclic ketones, (P.), B., 1133. Indigoid vat dyes, (P.), B., 1135. Colour lakes, (P.), B., 1152.
- Bonhôte, G., and Apotheker, C., azo-dyes [ice colours], (P.), B., 14.
- and Landt, G. E., laminated products, (P.), B., 111.
- and Widmer, G., pigment powders, (P.), B., 815.
- Widmer, G., and Pierce, F. W., dyeing or printing of cellulosic fibres, (P.), B., 946.
- See also I. G. Farbenind.
- Soc. of Public Analysts, bibliography of heavy metals occurring in food and biological material, 1921—1933, A., 247.
- Analytical Methods Committee, report of Sub-Committee on determination of unsaponifiable matter in oils and fats and of unsaponified fat in soaps. II. Determination of unsaponified fat in soaps, B., 1002. Second report of Sub-Committee on determination of arsenic, lead, and other poisonous metals in food-colouring materials, B., 1021.
- Socony-Vacuum Corporation. See Rather, J. B., and Tarte, C. E.
- Socony-Vacuum Oil Co., Inc. See Tarte, C. E.
- Soda, T., and Egami, F., glucosulphatase. XI. Mode of reaction; expression of enzyme concentration, A., 659.
- Söder, H. See Euler, H. von.
- Söderberg, C. W., foam generation for fire-extinguishing purposes, (P.), B., 659.
- Söderholm, G. See Hägg, G.
- Söderman, M., absolute value of the X-unit, A., 272.
- Söderqvist, J., vacuum spark spectra of sodium, magnesium, aluminium, and silicon, A., 271.
- Söderström, B., acidity of cultivated soils and the feeding of milch cows on home-grown fodder, B., 1159.
- Söhnchen, E., electrical and heat conductivity of cast iron, B., 103. Physical properties of cast iron, B., 309.
- and Bornhofen, O., coefficient of expansion of cast iron, B., 309.
- and Pivovarsky, E., influence of copper on grey cast iron, B., 853.

- Soelberg, J. M. F., generation of gaseous fuels, (P.), B., 793.
- Söllner, K. See Bondy, C.
- Sørensen, E. T. See Frisch, O. R.
- Sørensen, J. U. See Langseth, A.
- Sørensen, N. A., lipochromes of marine animals. V. Astacene from fish-livers. VI. Carotenoids of salmon flesh, A., 882, 1265. Chromatographic adsorption analysis, A., 1091.
- and Trumpy, B., dispersion and rotatory dispersion of simple sugar derivatives, A., 431.
- Soeters, K. See Aubel, E., and Khouvine, Y.
- Soffer, J. L. See Harrop, G. A.
- Sofin, N., oil content of cottonseed, B., 159.
- Sogn, H. See Frivold, O. E.
- Sohler, K., separation of oil from oil-containing substances, (P.), B., 238.
- Sohn, E., Meanor, E. D., and Standard Sanitary Manufg. Co., chromium-plating bath, (P.), B., 1052.
- Sohns, F. See Freudenberg, K.
- Sokalov, G. A., and Galion, A. I., effect of removal of lime salts on crystallisation of syrup, B., 518.
- Sokolik, A., and Schtsholkin, K., detonation in gas mixtures. II. Influence of pressure on velocity of a detonation wave, A., 1080.
- and Slatov, B., rôle of charged particles in propagation of flames; propagation of flames in transverse electric fields, A., 39.
- Sokoloff, V. P. See Eaton, F. M.
- Sokolov, A., determination of nitrogen in amorphous, B., 60. Significance of soil type and its mechanical composition for sensitiveness of plants to chlorine, B., 73.
- Sokolov, A. D., and Buchartzev, M. M., faolite, a new chemically stable material, B., 1152.
- Sokolov, A. V., influence of ammonium sulphate and sodium nitrate on action of rock phosphates [in soil], B., 566.
- Sokolov, N. I., chemical analysis of soils, B., 71. Analysis of water extracts of soils, B., 198.
- Sokolov, N. N. See Kobosev, N. I.
- Sokolov, P. I. See Krauze, L. E.
- Sokolov, S. J., and Dulitzkaja, R. A., action of iron, aluminium, and chromium salts on gelatin, A., 580.
- and Koliakova, G. E., physical chemistry of tanning. I. Electro-chemical properties of vegetable tanning agents, B., 863.
- and Ptschelín, V. A., lamp potentiometer and its application to the glass electrode, A., 320.
- See also Arbusov, G. A.
- Sokolova, A. A. See Besborodov, M. A.
- Sokolova, L. N., determination of manganese and permanganate present together, A., 55.
- Sokolova, N. M., colloid-chemical phenomena in formation of viscose fibre. I., B., 142.
- Sokolovski, A. A., ammonium sulphate from gypsum and phosphogypsum, B., 492.
- and Gurevitch, L. M., ammonium sulphate from Don gypsum, B., 492.
- Sokolovski, A. N., soil structure, B., 163.
- Sokolovski, D. S., properties of lime half-stuff, B., 142.
- Sokolovski, N. A., structure of soils, B., 243.
- Sokolskaja, I. L., investigation of conditions governing formation of a layer of tungsten nitride by the method of contact potentials, B., 1052.
- Solacolu, T., and Herrmann, glucoside and a hydrolysing enzyme in bark of *Periploca graca*, L., A., 268.
- Solandt, O. M. See Fletcher, J. P.
- Solari, A. A. See Sagastume, C. A.
- Solarino, G., "oryzotoxin" and experimental beri-beri in the pigeon, A., 1174.
- Solberg, P. See Kappen, H.
- Soldatenkov, S., artificial ripening of sub-tropical fruit by alcohol and ethylene, B., 652.
- Soldi, A., maintaining concentration of oxygen [in sealed rooms] in protection of crowds against chemical attacks, B., 207.
- Soletschnik, N. J., xylan esters, A., 331. Physical properties of parchment, B., 491. Hydrolysis of wood with formic acid, B., 1039.
- Soliven, F. A., proximate chemical composition of seed and oil of Philippine oil-bearing seeds. I. *Pongamia pinnata*, Merr., B., 1002.
- Sollazzo, G., action of 132-volume aqueous hydrogen peroxide on carbonaceous substances obtained by action of concentrated sulphuric acid on sucrose, glucose, etc., A., 329. Preparation of trimethyl-encitrinitroamine, A., 760.
- Solmssen, U. See Karrer, P.
- Solodar, L. S. See Orlov, N. N.
- Solodki, F., pine oil, B., 829.
- Solodovnikov, P. A., Khaikova, N. A., and Kositzuin, D. I., ammonia-nitrate fertilisers from gypsum, B., 116.
- Solomin, N. V. See Kitaigorodski, I. I.
- Solomon, J., annihilation of high-energy positive electrons in passing through matter, A., 679.
- Solomon, W. See Henry, T. A.
- Solomonov, M. Y. See Budnikov, P. P.
- Solotareva, A. M., electrical conductivity of homopolar compounds, A., 683.
- Solotareva, N. P., Schaal, G., Goldmann, L. N., and Zvilichovskaja, E. J., lipin metabolism and electrolytes in obesity, A., 887.
- Solotareva, N. V. See Muchina, Z. S.
- Soloveva, V. A. See Perelman, S. S.
- Soloveitschik, L. S. See Ezrielev, I. M.
- Soloviev, S. P., petrological study of Malka river granodiorite laccolith (in Northern Caucasus) in connexion with its radium content, A., 60.
- Solovieva, E. M. See Balaschova, O. N., and Scharpenak, A. E.
- Solovjeva, L. See Rehbindler, P. A.
- Solovjeva, N. A. See Illarionov, V. V.
- Solowiejczyk, S. See De Brouckère, L.
- Soltz, L. M. See Schwartzman, M. B.
- Solun, A. S., and Arseniev, A., foot disorders in battery-reared chicks, B., 522.
- Danilova, A. K., and Chlebnikov, N. I., influence of feeds on acid-base metabolism of adult fowls, B., 477.
- and Schuster, M. J., acid-base balance in poultry fattening, B., 477.
- See also Chlebnikov, N. I.
- Solvay Process Co. See Mohler, D. D., and Sundstrom, C.
- Someno, F. See Kato, S.
- Somers, L. S. See Yerger, W. S.
- Somerville, I. C., Raterink, H. R., and Röhm & Haas Co., tanning material, (P.), B., 163.
- Somin, B. E. See Messkin, V. S.
- Sômiya, T., and Nakamura, Yoshio, photometric titration; application of the copper-cuprous oxide cell and determination of vanadium in special high-speed steel, B., 854.
- See also Hevesy, G. von.
- Sommer, See Gülich.
- Sommer, A., and T. R. C. Corp., apparatus for producing pulverulent hydraulic binders with bituminous constituents, (P.), B., 1097.
- See also "Straba" Strassenbaubedarfs-A.-G.
- Sommer, A. L., phosphates in [plant] solution cultures, A., 553.
- Sommer, E., conductometric determination of water in acetone, B., 1036.
- See also Mayrhofer, A.
- Sommer, H. See Heiduschka, A.
- Sommer, H. H. See North, G. C., Stebnitz, V. C., and Templeton, H. L.
- Sommer, L. A., and Leyst-Küchenmeister, C., metallising processing apparatus, (P.), B., 1099.
- Sommerfeld, A., thermo-electric effects of the alkalis, A., 1312.
- and Maue, A. W., retardation loss of cathode rays on encountering atomic nuclei, A., 1293.
- Sommerman, G. M. L., behaviour of dielectrics under alternating stress, B., 638.
- Sommerneyer, K. See Seeliger, R.
- Sommière, A. See Prevost, C.
- Sonbert Machine Co., de-liquefying a liquid suspension of solid materials [in paper-making, etc.], (P.), B., 482.
- Sonder, K. See Milne, S.
- Sonderhoff, R., dehydrase system of yeast, A., 253.
- See also Wieland, H.
- Sone, C. See Kitasato, Z.
- Sonn, A. [with Podschus, R., Schützler, K., and Stephani, G.], constitution of pyrrolines, A., 355.
- Litten, W., Laurien, H., Schützler, K., and Meyer, W., ring-formation in heterocyclic compounds, A., 990.
- Sonnenenthal, P. von, treatment of wood, (P.), B., 1144.
- Sonnery, S. See Lumière, A.
- Sonntag, A. See Neumann, B.
- Sonol, J., efficacy of stabilisers used for preservation of hydrogen peroxide [solutions], B., 543.
- See also Machado, J. E.
- Sonsthagen, A., apparatus for grinding material in a more or less viscid condition, (P.), B., 129.
- Sontag, L. A., and Norton, A. J., phenolic resin adhesive in the plywood industry, B., 1103.
- See also Norton, A. J.
- Soper, F. G., kinetics of slow reactions and their entropy changes, A., 1463.
- See also Jones, E. G., and Jones, I.
- Sopwith, D. G. See Gough, H. J.
- Sorber, D. G. See Church, C. G.
- Sordelli, A., and Ferrari, J., plurality of antigens of *Clostridium welchii*, A., 1169.
- Sordelli, S., manufacture of artificial textiles by the viscose process, (P.), B., 944.
- Soreni, I. T., determination of creatine-phosphoric acid, A., 1521.
- Sorenson, S. O., drying oils, B., 860.
- Sorg, L. V., colour-stabilisation of gasoline by amines, B., 888.
- Soriano, M. F., influence of amount of fertiliser in soil on growth of rice and composition of its leaves, B., 566.

- Sorkin, E. See Leites, S.
 Sorkness, L. L. See Fox, D. L.
 Sorokin, A., and Uporova, E., relationship between temperature and moisture content of oleaginous seed-pulp, B., 1149.
 Sorokin, A. V., effect of oil immersion on insulating properties of insulators, B., 731.
 Sorokin, M. M. See Filipovitch, I. V.
 Sorokin, M. N. See Tuchovitzki, N. V.
 Sorokina, A. V., and Tyagno-Ryadno, M. G., rôle of micro-organisms in humus formation, B., 243.
 Sorokivski, F. E. See Afanasiev, N. N. A.
 Soroos, H. See Coleman, G. H.
 Sorrentino, E. See Marotta, D.
 Soru, E., dehydrogenase of *B. aertrycke* S. and R., A., 1541.
 Sorum, C. H. See Fisher, Emory.
 Sosa, A., glucoside from *Betula alba*, L.; betuloside and its aglucone, betuligenol, A., 1110.
 Soskin, S., and Allweiss, M. D., hypoglycemic phase of glucose tolerance curve, A., 515.
 Allweiss, M. D., and Cohn, O. J., influence of pancreas and liver on glucose tolerance curve, A., 383.
 Priest, W. S., and Schutz, W. J., influence of adrenaline on exchange of sugar between blood and muscle, A., 127.
 See also Corkill, A. B.
 Soskina, E. A. See Krauze, M. V.
 Sosman, R. B., and Austin, James B., apparatus for measuring magnetic susceptibility of solids and liquids at high temperatures, A., 321.
 See also Greig, J. W.
 Sosnina, A. S. See Kazarnovskaja, M. A.
 Sosnowski, L., polarisation of fluorescence of Cd vapour, A., 2.
 Radioactivity excited in platinum by neutrons, A., 426.
 Artificial radioactivity excited in gold and the complexity of its radiation, A., 426.
 Artificial radioactivity of bismuth, A., 559.
 Artificial radioactivity of iridium, A., 678.
 Sosson, C. E. See Imperial Chem. Industries.
 Sotgia-Rovelli, T., new indicators for bromometric titrations, A., 718.
 Sotnikov, E. I., and Palei, T. J., stability of strains of *Aspergillus niger* as regards acid production, A., 661.
 Sotola, J., nutritive value of winter-wheat straw, A., 652.
 Sou, P. T., action of magnesium phenyl bromide on α -bromobutyridimethylamide, A., 1357.
 Soubarev-Chatelain, (Mme.) Z., mannitol-dimolybdic acid, A., 959.
 Souder, W., Hidnert, P., and Fox, J. F., autographic thermal expansion apparatus, A., 187.
 Souders, M., jun. See Brown, G. G.
 Soukup, H. See Schropp, W.
 Sourtag, A. See Heger, A.
 Souterbieg, J., ammonia content of the liquids of the internal media of some invertebrates, A., 1524.
 South Metropolitan Gas Co., Chandler, D., and Skinner, A. J., thermostats for controlling flow of gas, (P.), B., 482.
 Firing of baths for melting metals or heating liquids, (P.), B., 929.
 and Prestage, A. J., incandescence gas mantles, (P.), B., 662.
 and Stanier, H., reaction between fluids, (P.), B., 5.
 Southard, J. C., and Milner, R. T., low-temperature specific heats. V. Heat capacity of tricalcium phosphate between 15° and 298° abs., A., 924.
 Southern, B. L., copper benticides, B., 1158.
 Southern Mineral Products Corporation, hydrolysing titaniferous [sulphate] solutions, (P.), B., 148.
 See also Saklatwalla, B. D., and Walker, G. E.
 Southern Oregon Sales, Inc. See Moore, J. C.
 Southgate, H. See Butler, A. M.
 Southwell, R. V. See Gemant, A., and Hallam, H.
 Souviron, P. F. J., Bigourdan, P. E., and Bebin, P., preparation of copper compounds and fungicide mixtures obtained with such compounds, (P.), B., 495.
 Sova, Z. V. See Valiaschko, N. A.
 Sovs, E. See Seljakov, N.
 Sowa, F. J., Hennion, G. F., and Nieuwland, J. A., organic reactions with boron fluoride. IX. Alkylation of phenol with alcohols, A., 744.
 Kroeger, J. W., and Nieuwland, J. A., preparation of a new hydroxyfluoboric acid, A., 592.
 See also Croxall, W. J., Dorris, T. B., and Slanina, S. J.
 Sowden, W. See Clayton Son & Co., Ltd.
 Sowter, P. F. C. See Brit. Celanese.
 Soyenkoff, B. C., and Hineck, C. F., jun., p_H and acid-neutralising power of saliva, A., 883.
 Sozanski, S. See Terlikowski, F.
 Spaak, G., treatment of soft feed-water: precipitation of residual hardness, B., 289.
 Spacu, G., and Armeanu, V., volumetric determination of mercury, A., 837.
 Synthesis of yellow tetrapyridine ferrous thiocyanate, A., 1131.
 Double amines of platinum, A., 1471.
 and Dima, L., complex amines of fluoboric acid, A., 946.
 and Drăgulescu, C., potentiometric determination of sulphite, A., 595, 717.
 Ammonium mercury sulphites; potentiometric investigations, A., 1469.
 and Kuraš, M., new reagent [thiol-benzthiazole] for gravimetric determination of certain metals. I. Copper. II. Macro- and micro-determination of cadmium, A., 1094, 1216.
 and Macarovici, C. G., macro- and micro-gravimetric determination of copper, A., 1338.
 Indirect volumetric determination of zinc, A., 1473.
 and Murgulescu, I. G., potentiometric determination of mercury, A., 837.
 and Popper, E., refractometric investigation of formation of compounds in aqueous solution, hitherto designated as double salts. I. and II., A., 162, 824.
 Spacu, P., potentiometric determination of arsenates, A., 463.
 Potentiometric determination of selenocyanide in presence of halides, A., 718.
 Gravimetric determination of silver, A., 836.
 Quantitative separation of iron and cobalt, A., 838.
 See also Binder, O.
 Spacy, J. See Goiffon, R.
 Späth, K. See Kalisch, E.
 Späth, E., and Becke, F., cactus alkaloids. XII. Constitution of anhalamine. XIII. New cactus alkaloid, anhalinine, and constitution of anhalonine. XIV. Anhalidine, A., 220, 635, 873.
 Hicks, C. S., and Zajic, E., *d*-normicotine, an alkaloid of *Duboisia Hopwoodii*, F. v. Muell, A., 1136.
 and Holzen, H., natural coumarins. XV. Partial synthesis of imperatorin and preparation of oxyimperatorin, A., 986.
 and Keszler, F., [aldehyde of violet leaves], A., 197.
 Cactus alkaloids. XVI. Synthesis of anhalonine and of lophophorine, A., 1389.
 and Kuffner, F., tobacco bases. II. Simplification of Pictet's synthesis of nicotine, A., 635. [Simplification of Pictet's synthesis of nicotine], A., 995.
 [β -Hydroxyphenylethylamines and their transformations. III. Synthesis of benzyloquinolines under physiological conditions, A., 1379.
 Kuffner, F., and Platzer, N., constitution of peganine (vasicine), A., 635. Synthesis and constitution of peganine (vasicine), A., 764.
 Peganine (vasicine) and its derivatives, A., 873.
 Resolution of peganine (vasicine) into its optically active forms, A., 1136.
 and Pailer, M., natural coumarins. XIV. New synthesis of angelicin (from *Angelica archangelica*, L.), A., 868.
 Schmid, L., and Sternberg, H., constitution and synthesis of cotarnic acid and synthesis of 5-methoxy-3:4-methylenedioxyphthalic acid (isocotarnic acid), A., 213.
 and Zajic, E., tobacco bases. III. *l*-Normicotine, A., 1387.
 Spaeth, J. N., dormancy in *Tilia* seed, B., 326.
 Spaght, M. E. See Parks, G. S.
 Spagnol, G., relation between vitamin-E and sex hormones, A., 261.
 Kephalsins and blood coagulability, A., 509.
 Pharmacological action of sulphurated oil, A., 655.
 Spain, W. C., and Newell, J. M., ultrafiltration of ragweed pollen extracts, A., 549.
 Spalding, G. R., taste and odour control at Hackensack Water Company, New Jersey, B., 127.
 Spanagel, E. W., and Carothers, W. H., polymerisation and ring-formation. XXV. Macrocyclic esters. XXVI. *meta*- and *para*-Rings, A., 844.
 Spandau, H. See Scheele, W.
 Spangler, J., liquids for heat transport in chemical engineering, B., 49.
 Spangler, R. D., current views concerning the liquid state, A., 1305.
 Spangler, S. F., conversion of waste ferrous sulphate into sulphuric acid, B., 493.
 See also Chem. Construction Corp.
 Spark, C. See Marine, D.
 Sparks, J. W. See Standard Oil Co.
 Sparks, W. J. See Du Pont de Nemours & Co., E. I., and Reichert, J. S.
 Sparnberg, G. See Helferich, B.
 Spassov, A. See Ivanov, D.
 Spaulding, L. B. See Chamberlain, J. S.
 Spausta, F., distribution equilibrium between alcohol, benzene, and water, A., 159.
 Solubility of water in, and boiling ranges of kerosene-alcohol mixtures, B., 133.

- Spausta, F., volume changes of mixtures of benzine and petroleum with alcohol and motor benzol, B., 710. Water absorptivity at 0° and the behaviour on boiling of mixtures of benzine, benzol, and alcohol, B., 1081.
- Speakman, J. B., theory of the acid dye-bath, B., 352.
- and Clegg, (Miss) H., relationship between chemical constitution and leveling properties of acid dyes as applied to wool, B., 352.
- and Greenwood, J. R., oiling of wool, B., 843.
- and Stott, (Miss) E., chemical theory of dyeing: affinity of deaminated wool for acid dyes, B., 352. Acid-combining capacity of wool, B., 1087.
- See also Imperial Chem. Industries.
- Speakman, J. C., surface tensions and partial vapour pressures of aqueous aniline solutions, A., 930.
- Spealman, C. R. See Blum, H. F.
- Spealman, M. L., and Rodebush, W. H., reactions of oxides of nitrogen with atomic oxygen and nitrogen, A., 1206.
- See also Phipps, T. E., and Rodebush, W. H.
- Speas Manufacturing Co., food products containing pectin, (P.), B., 1163.
- Spech, G. See Ullmann, L. von.
- Specht, H., aerobic respiration in *Spirostomum ambiguum* and the production of ammonia, A., 898.
- and Holzhydrylyse A.-G., separation of dissolved volatile substances [hydrogen chloride] from their solvents, (P.), B., 803.
- Specht, P. See Scheunert, A.
- Specht, W. See Mothes, K.
- Specht, Z., electrical conductivity of compressed graphite powder, A., 683.
- Spector, B. K., Baylis, J. R., and Gullans, O., effectiveness of filtration in removing from water, and of chlorine in killing, the causative organism of amoebic dysentery, B., 256.
- Spector, E. M. See Koschkin, M. L.
- Spedding, F. H., and Bear, R. S., absorption spectra of samarium ion in solids. V. Absorption spectrum and energy levels of Sm^{+++} ion as it exists in monoclinic crystals of $\text{Sm}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O}$, A., 144.
- and Nutting, G. C., Zeeman effect of the absorption lines of chrome alum, A., 1052.
- Shane, C. D., and Grace, N. S., fine structure of H_2a , A., 135. Fine structure of H_α , A., 271.
- See also Shane, C. D.
- Speedy, A., calcene: a reinforcing ingredient [for rubber], B., 113. [Compression tests on plasticity of unvulcanised rubber], B., 512.
- Speer Carbon Co. See Bemis, A. S.
- Speers, P. C., Yajnik, N. A., Goyle, D. N., and Ahmad, Z., structure of soaps, B., 1149.
- Spellmeyer, E. F., hydration [hydrolysis] of glycerides, (P.), B., 814.
- Spence, A. W., and Scowen, E. F., effect of ascorbic acid on experimental goitre, A., 669.
- Spence, D., bacterial decomposition of the rubber in the latex of *Hevea* in relation to function of rubber in the living plant, B., 1005.
- and McCallum, W. J., function of the rubber hydrocarbon in the living plant, B., 968.
- Spence, H., Crundall, S. F. W., and Spence & Sons, Ltd., P., preparation and use of titanium compounds, (P.), B., 147.
- Osborne, G., and Spence & Sons, Ltd., P., preparation of base-exchange materials, (P.), B., 147.
- See also Hock, A. L.
- Spence, H. L. See Hulbert, H. W.
- Spence, R., gas washing device, A., 723. Thermal oxidation of formaldehyde, A., 846.
- and Wild, W., liquid monomeric formaldehyde, A., 608. Vapour-pressure curve of formaldehyde, and related data, A., 691. Thermal reaction between chlorine and formaldehyde, A., 1107.
- Spence & Sons, Ltd., P., Coles, W. V., Scott & Son, London, Ltd., G., and Riley, G. W., drying of solid subdivided materials, (P.), B., 1073.
- See also Hock, A. L., and Spence, H.
- Spencer, C. F., and Sinclair Refining Co., lubricating oil, (P.), B., 713.
- Spencer, E. L., influence of nutrition on host susceptibility to yellow tobacco mosaic, A., 798. Influence of phosphorus and potassium supply on host susceptibility to yellow mosaic infection, B., 691.
- Spencer, H. J. See Ward, J. C.
- Spencer, H. M., and Justice, J. L., empirical heat capacity equations for simple gases, A., 21. Equilibrium in system vanadium tetroxide-carbon monoxide-vanadium trioxide-carbon dioxide, A., 35. Reaction of carbon monoxide on molybdenum oxides, A., 44.
- Spencer, J. F. See Hollens, W. R. A.
- Spencer, L. J., mumpcowio, a granular type of meteoric iron, A., 601. Fictitious occurrences of iron silicide (ferro-silicon), A., 1347.
- Spencer, V. G. See Stewart, R.
- Spencer, W. D. See Imperial Chem. Industries.
- Spencer, W. M. See Kratz, G. D.
- Spencer Kellogg & Sons, Inc. See Schwabeman, A.
- Spencer-Smith, J. L., negative ions of iodine. I. Probe measurements. II. Ion beams, A., 677.
- Spengler, O., preparation of [beet-sugar] strikes and their treatment, B., 119. Fertilisation of beet and soil-phosphate investigations, B., 326. Modern [beet-sugar] juice purification, B., 743.
- and Böttger, S., can the purification of [beet-sugar] juice be improved by an addition of acid? I. and II., B., 743. Darkening of [beet-sugar juices] during evaporation and boiling, B., 920.
- Böttger, S., and Bonne, C., sugar-beet variety protruding from soil: its [factory] "workability," B., 516.
- Böttger, S., and Werner, E., efficiency of froth-preventing agents in beet-sugar factories, B., 1111.
- and Dorfmueller, G., action of carbon dioxide on lime water and of alkali carbonate on calcium salt solutions. II., A., 1088. Gelation of sugar solutions with calcium glycolate, B., 40.
- Matthies, W., and Tödt, F., rapid determination of water in dried beet slices, especially by measurements of dielectric constants, B., 283.
- and Pfannenstiel, A., oxidation of reducing sugars by oxygen, A., 1354.
- Spengler, O., and Tödt, F., control of sugar boiling by means of electrical conductivity. VI., B., 283. Determination of invert sugar in raw sugar, B., 375.
- Zablinsky, K., and Böttger, S., incrustations in [beet-sugar factory] evaporating plant, B., 648.
- Speranskaja, M. A. See Gurvitsch, M. N.
- Sperr, F. W., jun. See Koppers Co. of Delaware.
- Sperry, W. M., cholesterol esterase in blood, A., 1536.
- and Schoenheimer, R., comparison of serum, heparinised plasma, and oxalated plasma in regard to cholesterol content, A., 1261.
- Sperti, G., and Gen. Development Laboratories, Inc., activation of materials [vitamin-D in food products, ergosterol, etc.], (P.), B., 973.
- Norris, R. J., Withrow, R. B., Schneider, Herman, and Gen. Development Labs., Inc., treatment of food substances, (P.), B., 1022.
- Speter, M., determination of water [in sugar-factory products], using the dielectric method, B., 1015.
- Speyer, E. R., entomological investigations, B., 374. Spraying in control of the tomato moth caterpillar, B., 741. Cyanide fumigation, B., 742.
- Spicer, W. E. See Standard-I. G. Co.
- Spiegel, E. A. See Spiegel-Adolf, M.
- Spiegel-Adolf, M., physical chemistry of lipins. II. Protective power of lipins. III. Relations between the iodine value of monophosphatides and their relations to neutral salts, A., 1202, 1523.
- and Spiegel, E. A., polarisation studies in tissue models, A., 376.
- Spiegler, G., formation of the Röntgen image with regard to scattered irradiation, A., 1331.
- Spiegler, L. See Du Pont de Nemours & Co., E. I.
- Spiehler, A. F., Wagner, C. R., and Gyro Process Co., treatment of hydrocarbon oils, (P.), B., 181.
- Spielberger, G. See Fischer, Hans.
- Spielhaczek, H., determination of fluorine in sulphuric acid and oleum, B., 354.
- Spielman, F. See Geist, S. H.
- Spielman, M. A., structure of Troeger's base, A., 630. Decomposition of triphenylmethyl hyponitrite, A., 1114.
- Spiers, C. H., physical testing of leather, B., 864.
- Spiers, C. W. F. See Den Hoed, D.
- Spiers, F. W. See Brindley, G. W.
- Spiers, M. A. See Brockett, S. H.
- Spies, J. R., eroten resin. I. Toxicity studies using goldfish. II. Toxic and vesicant action of certain of its derivatives, A., 527. Recovery of silver and iodine from silver iodide, A., 591.
- See also Drake, N. L.
- Spies, T. D., and Hanzal, R. F., experimental production of hypercalcaemia in man by means of irradiated ergosterol, A., 129.
- Spiewankiewicz, F., fluorescence of mixtures of Cd and Zn vapours, A., 2.
- Spildo, L. S., calcium and phosphorus exchange in young growing pigs, A., 893. Growth of pigs. I. Lime and phosphate metabolism in young growing pigs, A., 1274.

- Spilker, A., perhydrochrysene (octadeca-hydrochrysene, $C_{18}H_{30}$) and the constitution of lubricating oils, B., 714.
- Spindler, L. A., effect of copper sulphate on infective larvæ of the nematodes *Stephanurus dentatus* (Stephanuridae) and *Otophagostomum* spp. (Strongylidae), B., 1158.
- Spinette, V., tunnel oven for cooking products by indirect heating, (P.), B., 332.
- Spinks, J. W. T. See Herzberg, G.
- Spinnler, F. See Kallab, F.
- Spinoglio, P., and Ravenna, G., systems naphthalene-acetone and diphenyl-acetone and the solubility of a third substance in them, A., 1457.
- Spira, L. See Roth, Emery.
- Spirhanzl, J., rendzina soils, B., 964.
- Spiridonova, A. S. See Yaitschnikov, I. S.
- Spirito, A., behaviour of peroxidases during embryonic development, A., 519.
- Špirk, L., dyeing cellulose acetate, B., 98.
- Spitzer, G., and Parfitt, E. H., relation of proteolytic enzyme activity to proteolytic organisms found in [milk-]separator slime, B., 873.
- Spivak, G. V. See Zaitzev, A. A.
- Spoelstra, H. J. See De Langen, L. H.
- Spohn, H., optical properties of autumn coloured leaves, A., 551.
See also Kautsky, H.
- Spokes, R. E., and Amer. Brakeblok Corp., composition friction element, (P.), B., 338.
and Murray Co., E. A., insecticide [for fabrics], (P.), B., 848.
- Sponheuer, A. See Tofaute, W.
- Spoon, W., packing of turpentine oil from the Dutch Indies, B., 464.
- Spooner, L. W. See Bingham, E. C.
- Spooner, W. See Jones, Frederick Wilson.
- Spooner, W. W., drying machines, (P.), B., 531. Washing or impregnation of webs of material with liquids, (P.), B., 766.
- Sporring, P. A., Gwinn, C. D., and Telegraph Condenser Co., Ltd., electrolytic condensers, (P.), B., 639.
- Sporzynski, A., α -naphthylmethylarsine derivatives, A., 368. β -Chloro-derivatives of esters of oxy-acids of sulphur, A., 1104.
- Spoto, P., and Sarzana, G., nitrogen metabolism. III. Toxic action of salicylic acid, benzonaphthol, and phenol, and protective action of base-forming substances, A., 526.
- Spotowska, M. See Jezierski, T. W.
- Spradlin, J. Q. See Eddleman, V. C.
- Spragg, W. T. See Gillespie, A. H. C. P.
- Spragge, J. A., additive products of halogenyl amides with pyridine, A., 355.
- Sprague, A. D., and Nielsen, H. H., infrared rotation vibration spectrum of hydrogen sulphide, A., 10.
- Sprague, H. B., utilisation of nutrients by colonial bent (*Agrostis tenuis*) and Kentucky blue grass (*Poa pratensis*), A., 420.
- Farris, N. F., and Cathcart, C. S., improving pastures of New Jersey, B., 245.
- Farris, N. F., and Colby, W. G., effect of soil conditions and treatment on yields of tubers and sugar from the American artichoke (*Helianthus tuberosus*), B., 868.
See also Fairchild, D. H.
- Sprague, J. M., and Adkins, H., hydrogenation and hydrogenolysis of α -diketones, A., 198.
- Beckham, L. J., and Adkins, H., preparation of α -diketones by the Claisen reaction, A., 198.
- Sprague, R. G., effect of "chronic" experimental liver damage on the blood-sugar response to insulin, A., 789.
- Spraragen, W., welding in the building industry, B., 1098.
- Sprayo-Flake Co. See Bennett, R. E.
- Spring, P. S., polyterpenoid nature of the sterols, A., 1493.
and Vickerstaff, T., resinsols. III. α - and β -Amyrone oxides and their derivatives, A., 87.
See also Coffey, D. H., and Heilbron, I. M.
- Springer, L., glass from blast-furnace slag, B., 495.
- Springer, R. D. See Waring, R. K.
- Springer, U., is the term "Huminsäure" justified to-day? B., 36. The place of "Huminsäure" in the chemistry of humus, B., 372.
- Springfield Mills (Radcliffe), Ltd., and Kay, L., solvent-recovery plant, (P.), B., 482.
- Sprinkel, K. M. See Allen, C. H.
- Spriskov, A. A. See Fedorov, B. P.
- Sproat, J. E., and Vanderbilt Co., Inc., R. T., earthenware body, (P.), B., 993.
- Sproxtton, F., and Brit. Xylonite Co., Ltd., materials for producing or detecting polarised light, (P.), B., 97.
- Spruijt, F. J. See Blanton, F. S.
- Sprunk, G. C., and Thiessen, R., relation of microscopical composition of coal to chemical, coking, and by-product properties, B., 580.
See also Fieldner, A. C.
- Spruyt, J. P., and Donath, W. F., ascorbic acid and its determination, A., 130. Determination of ascorbic acid, A., 547. Vitamin- B_1 content of glutinous rice, A., 792. Antineuritic (B_1) vitamin content of "black" katjang idjoe (*Phaseolus radiatus*), A., 792.
- Spurlin, H. M. See Hercules Powder Co.
- Spurrell, W. R. See McSwiney, B. A.
- Spychalski, R., solubility of chemically-defined hydrates of silicon dioxide, A., 292. Emulsions of paraffin oil stabilised by soap, B., 212.
and Neterowicz, J., cataphoretic measurements by the aid of resistance lamps, using a direct current, A., 320.
- Spyco Smelting & Refining Co. See Taylor, N. O.
- Squibb & Sons, E. R. See Black, A., Christiansen, W. G., Harris, S. E., Harvey, A. W., Jones, W. S., and Nitardy, F. W.
- Squier, M. See Morgan, A. F.
- Squire, L. R. L., and Goodwin, C. J., manufacture and use of binders for binding aggregates such as briquettes, (P.), B., 87.
- Squires, L. See Lewis, W. K.
- Srebrow, B., influence of crystalline addenda on the decomposition temperature of carbonates, A., 942.
- Sreenivasan, A., rôle of silicon in plant nutrition, B., 73. Rôle of silicon in plant nutrition. I. Nature of interaction between soil and soluble silicates. II. Adsorption of silica in soluble forms by colloidal oxides of iron and aluminium, B., 565, 1010. Determination of nitrogen in soils. V. Determination of total nitrogen, including nitrate, B., 820.
- Sreenivasan, A., and Subrahmanian, V., rôle of organic matter in plant nutrition. III. Influence of decomposition of organic matter on soil structure, B., 38. Biochemistry of water-logged soils. IV. Carbon and nitrogen transformations, B., 281. Nature and extent of periodic fluctuations in soil constituents, B., 470.
- Sreenivasaya, M., Sreerangachar, H. B., and Iyengar, N. K., dilatometric studies in enzymic hydrolysis of polysaccharides. I. Inulin, A., 250.
See also Bhagvat, (Miss) K., Bhaskaran, T. R., Sastri, B. N., Sreerangachar, H. B., and Srinivasan, M.
- Sreerangachar, H. B., dilatometric studies in enzymic hydrolysis of polysaccharides. III. Hydrolysis of starch, amylose, and amylopectin by taka-diastase, A., 1535.
and Sreenivasaya, M., dilatometric studies in enzymic hydrolysis of polysaccharides. II. Hydrolysis of starch by malt diastase, A., 250. Isothermal calorimeter, A., 319. Dilatometric determination of the relative digestibility of proteins, A., 533.
See also Sreenivasaya, M.
- Srikantan, B. S., thermionic emission and catalytic activity. II. Thoriated surfaces; theory of Welsbach gas mantle. III. Mechanism of activation of gases at hot metallic surfaces, A., 273. Aluminium and zinc as water softeners, B., 432.
- Srinivasan, N., determination of tannin in plant materials. I. *Cassia auriculata*, A., 673. Preparation of sugar syrup from cashew apple (*Anacardium occidentale*, Linn.), B., 39.
and Sreenivasaya, M., enzyme preparation, A., 659. Spike disease of sandal (*Santalum album*, Linn.) XVII. pH and buffering capacity as factors of disease-resistance, B., 472.
See also Damodaran, M.
- Srinivasan, P. S., Raman spectra of isoprene, dipentene, and ocimene, A., 1301.
- Srinivasan, T. K. See Dey, B. B.
- Srivastava, L. N. See Maemahon, P. S.
- Stabenow, G. See Krüger, F.
- Stableforth, A. W., sewage. II. Bacteriological aspect, B., 1168.
- Stacey, M. See Haworth, W. N.
- Stacey, R. S., treatment of low-calcium tetany with calciferol, A., 1430.
See also Goadby, H. K.
- Stackelberg, M. von, structure of aluminium carbide, Al_4C_3 , A., 17. Structural principles of carbides, silicides, nitrides, and phosphides of electro-positive metals, A., 17. Kinetic significance of osmotic pressure, A., 1201. [with Heinrichs, M., and Schulte, W.], solubility of krypton and xenon in liquid oxygen, A., 25.
and Paulus, R., zinc and cadmium phosphides and arsenides; Zn_3P_2 lattice, A., 812.
and Quatram, F., lattice structure of beryllium carbide, Be_2C , A., 17.
and Schnorrenberg, E., crystal structure of aluminium carbide, Al_4C_3 , A., 17.
- Stackpole Carbon Co. See Sanders, V. H.
- Staddon, L. S. See McBain, J. W.
- Stadie, W. C., rôle of carbamino-compounds in transport of carbon dioxide by blood, A., 640.
- Stadler, J., use of Fixapret B in fast-to-washing fillings for fabrics, B., 353.

- Stadler, R. See I. G. Farbenind.
- Stádník, A., classification of protein-nitrogen in brewing, B., 1112.
- Stádník, P. M. See Poljakov, M. V.
- Stádnikov, G. L., organic mass of oil shale, B., 53. Analysis of solid fuels, B., 389.
- and Falkovskaja, A., composition of bituminous coals, B., 533. Composition of sapropelitic coals, B., 1122.
- and Larina, V. A., distribution of coal-sulphur among the low-temperature products of coal distillation, B., 389.
- Siskov, K., and Uschakova, A., [absorption by] humic acids, A., 819.
- Stadt, H. M. See Clayton, B.
- Stäblein, F., and Steinitz, R., double-yoke magnet-steel tester, B., 905.
- Stäger, H., and Biert, J., corrosion of copper-zinc alloys, B., 458.
- Staeger, R. See Wagner, Gustav.
- Staehelein, M., and Porchet, B., partial sterilisation of soils, B., 374.
- Stähli, J. See Dörner, W.
- Stählin, See Klapp, E.
- Staff, C. E. See Fischer, H.
- Staffeldt, F. W., control of the lime-soda water-softening process by a nomograph, B., 880.
- Stafford, E., and Richardson Co., pulp-forming process, (P.), B., 987.
- Stafford, O. F., carbonising process and apparatus, (P.), B., 294.
- Stagner, B. A., sweetening of gasoline with alcoholic alkali and sulphur, B., 535. Treatment of mineral hydrocarbon products, (P.), B., 441.
- Stahel, E., and Coumou, D. J., γ -radiation from uranium-X, A., 1048.
- and Ketelaar, H., diffusion of γ -rays, A., 6.
- Stahl, A. L., avocado maturity, B., 427.
- Stahl, H. See Rheinwald, H.
- Stahl, H. J. See Felton, L. D.
- Stähl, S. See Borén, B.
- Stahl, W., boric acid-alcohol flame reaction, A., 949. Rapid determination of small amounts of boron through intensity of flame coloration, A., 949.
- Staib, L. A., jun. See Eastman Kodak Co.
- Staiger, F. See Staudinger, H.
- Stainier, See Vivario.
- Stainless Steel Corporation, corrosion-resisting [chromium] steel, (P.), B., 504.
- Stainsby, W. J. See Hilditch, T. P.
- Stair, R. See Coblentz, W. W.
- Staker, E. V. See Wilson, B. D.
- Stakman, E. C. See Christensen, J. J.
- Stalé, J. See Tschumi, L.
- Staley Manufacturing Co., A. E. See French, A. H.
- Stálhane, J. B. See Stálhane, O.
- Stálhane, O., Stálhane, J. B., and Allmanna Svenska Elektriska Aktieab., rotary furnace for treating pulverised ore with gas, (P.), B., 857. Reduction of [iron] oxide ores, etc., by means of gas, (P.), B., 906.
- Stallmann, O. See Du Pont de Nemours & Co., E. I.
- Stalony-Dobrzański, J., sodium carbonate as a standard in alkali-acidimetry, A., 315.
- Stam, M. J., preparation of a plastic vulcanisable material from rubber, gutta-percha, balata, etc., (P.), B., 113.
- Stamatesco, S. See Eustatziou, G.
- Stamm, A. J., shrinking and swelling of wood, B., 632.
- and Loughborough, W. K., thermodynamics of swelling of wood, B., 498.
- Stamm, A. J., and Seborg, R. M., adsorption compression on cellulose and wood. I. Density measurements in benzene, B., 398.
- Stamm, F. C., factors governing heat transfer through [paper-machine] dryer shells, B., 222.
- Stamm, H., titrations with alkaline permanganate, A., 55. Esters of thiosulphurous acid, $H_2S_2O_3$, A., 729. Determination of oxidisability of natural and waste waters, B., 383.
- Stampe, G., industrial protection against carbon monoxide, B., 784.
- Stamsvik, A. L., and Heat Exchanger Co., heat-exchange device, (P.), B., 531.
- Stancey, R. See Dummett, G. A.
- Stanco, Inc., complex fungicidal copper compounds, (P.), B., 568.
- See also Fulton, S. C., Grant, D. H., and Pearson, H. P.
- Stancovici, N. See Maxim, N.
- Standard Alcohol Co. See Brooks, B. T.
- Le Baron, R. F., and Lebo, R. B.
- Standard Brands, Inc., invertase preparations, (P.), B., 41. Bactericidal and therapeutic agent, (P.), B., 333. Vitamin concentrates, (P.), B., 650.
- See also Buhrig, W. H., and Gore, H. C.
- Standard-I. G. Co., and Bonnell, L. S., lubricating oils, (P.), B., 90.
- and Christ, J., controlling temperature in hydrogenation reactors, (P.), B., 90.
- and Clark, E. M., improvement of illuminating oils, (P.), B., 295.
- and Davis, G. H. B., hydrogenation of carbonaceous materials, (P.), B., 393.
- and Edmonds, W. J., motor fuels, (P.), B., 295.
- and Ellis, C., joint hydrogenolysis and methanolysis [of hydrocarbon oils], (P.), B., 441.
- and Gohr, E. J., antidetonation motor fuel, (P.), B., 216.
- Gohr, E. J., and Cline, R. C., treatment of hydrocarbons, (P.), B., 295.
- Grimm, H. G., and Jannak, J., production of hydrocarbons [by dehydrogenation], (P.), B., 295.
- and Harding, C. T., hydrogenation of hydrocarbon oils, (P.), B., 90.
- and Haslam, R. T., refining of hydrocarbon oils, (P.), B., 344.
- and Jennings, J. M., hydrocarbon oils from solid carbonaceous material, (P.), B., 135.
- Peck, E. B., Kleiber, C. E., and Archibald, F. M., destructive hydrogenation of heavy hydrocarbon oils, (P.), B., 135.
- and Pier, M., preheating of carbonaceous materials, (P.), B., 213. [Liquid] hydrocarbons, (P.), B., 394. Treatment [destructive hydrogenation] of coals, tars, mineral oils, etc., (P.), B., 616. Hydrocarbons of high b.p. range, (P.), B., 1083.
- Pier, M., and Donath, E., liquid hydrocarbon products, (P.), B., 1126.
- Pier, M., and Hochschwender, E., hydrocarbons from varieties of coal, tars, mineral oils, etc., (P.), B., 712.
- Pier, M., and Kroenig, W., conversion of carbonaceous materials into useful hydrocarbon products, (P.), B., 260. Destructive hydrogenation [of carbonaceous material], (P.), B., 1125.
- Pier, M., and Winkler, K., recovery of reaction products of destructive hydrogenation of carbonaceous materials, (P.), B., 439.
- Standard-I. G. Co., Pier, M., Winkler, K., and Wissel, K., production of organic products [by hydrogenation of coal], (P.), B., 260.
- Pier, M., and Wissel, K., destructive hydrogenation of carbonaceous materials, (P.), B., 213. Valuable hydrocarbons by destructive hydrogenation, (P.), B., 217.
- Roos, H., and Schwamberger, E., removal of phenols from hydrocarbons, (P.), B., 214.
- and Russell, R. P., conducting high-temperature hydrogenation processes, (P.), B., 55. Production of low-boiling from higher-boiling hydrocarbons by the action of hydrogen at elevated temperatures, (P.), B., 55. Production of lubricants by hydrogenation of hydrocarbon oils, (P.), B., 345.
- Russell, R. P., and Asbury, W. C., catalytic hydrogenation of hydrocarbon oil, etc., (P.), B., 135.
- and Watts, R. N., recovery of valuable constituents from hydrogenation catalysts [containing molybdenum], (P.), B., 270.
- Watts, R. N., and Spicer, W. E., [hydrogenation] catalysts of increased activity, (P.), B., 270.
- Young, P. L., and Churchill, D., jun., preparation of low-boiling hydrocarbons from higher-boiling hydrocarbons, (P.), B., 11.
- Standard Oil Co., cracking of hydrocarbon oils, (P.), B., 10, 440. Improvement of mineral or lubricating oil by treatment with solvents, (P.), B., 486. Treatment of hydrocarbon oils, and improved oils resulting therefrom, (P.), B., 892.
- and Adams, C. E., dewaxing of hydrocarbon oils, (P.), B., 296.
- and Adams, E. W., insecticide and insectifuge, (P.), B., 692.
- and Arveson, M. H., wax polish, (P.), B., 959.
- and Atwell, H. V., separation of wax from [petroleum] oils, (P.), B., 793.
- and Baker, C. R., refining of hydrocarbon oil, (P.), B., 713.
- and Brown, B. K., nitration, (P.), B., 761.
- Brunstrum, L. C., and Loetscher, D. G., lubricant, (P.), B., 760.
- and Buchler, C. C., frost-prevention system, (P.), B., 1121.
- and Burk, R. E., conversion of hydrocarbons, (P.), B., 217, 344. Treatment of hydrocarbons [petroleum], (P.), B., 295.
- Burk, R. E., and Lankelma, H. P., motor fuel, (P.), B., 663.
- and Cleveland, C. R., insect repellent, (P.), B., 423.
- Diggs, S. H., and Page, J. M., jun., treatment of mineral lubricating oils, (P.), B., 838.
- and Giles, R. N., dewaxing system, (P.), B., 838.
- and McConnell, E. B., asphalt, (P.), B., 294.
- McGill, W. J., and Adams, C. E., propane dewaxing process, (P.), B., 838.
- and MacLaren, F. H., pour-test depressor [for lubricating oils], (P.), B., 346.
- and Mathias, H. R., foam prevention, (P.), B., 387.
- and Monro, D. A., bubble cap, (P.), B., 883.

- Standard Oil Co., and Parkhurst, *G. L.*, fractionation of coal-tar materials, (P.), B., 393.
- Parkhurst, *G. L.*, and Voorhees, *V.*, destearinising fatty oils, (P.), B., 734.
- and Paulus, *M. G.*, distillation of hydrocarbon oil, (P.), B., 893.
- Roberts, *Joseph K.*, and Watts, *G. W.*, stabilisation of light hydrocarbon oils and particularly pressure distillate, (P.), B., 11. System for stabilising light hydrocarbons, (P.), B., 11.
- and Robinson, *J.*, neutralisation of petroleum oil, (P.), B., 1127.
- Rogers, *T. H.*, and Voorhees, *V.*, motor fuel, (P.), B., 662.
- and Snow, *H. R.*, lubrication oils, (P.), B., 759.
- and Sparks, *J. W.*, asphalt emulsion, (P.), B., 294.
- Sullivan, *F. W., jun.*, and Voorhees, *V.*, lubricating oils, (P.), B., 261.
- and Voorhees, *V.*, antiknock motor fuels, (P.), B., 90. Dewaxing mineral oils, (P.), B., 215. Antiknock gasoline, (P.), B., 713. Colour-stabilised mineral oil, (P.), B., 759.
- Voorhees, *V.*, and Anderson, *John A.*, lubricating oil process, (P.), B., 937.
- Watts, *G. W.*, and Mathews, *W. B.*, distillation of hydrocarbon oils, (P.), B., 1035.
- and Whitman, *W. G.*, preventing corrosion of apparatus for distilling hydrocarbon oils, (P.), B., 893.
- and Wilson, *R. E.*, hydrogenation system [for hydrocarbons], (P.), B., 216. Apparatus for distilling hydrocarbon oil, (P.), B., 296. Decomposition of hydrocarbon oils, (P.), B., 1034.
- Standard Oil Co. of California, and Danner, *P. S.*, non-detonating fuel, (P.), B., 216.
- Davis, *W. N.*, and Hampton, *W. H.*, treatment [desulphurisation] of petroleum oils, (P.), B., 983.
- Davis, *W. N.*, and Rutherford, *J. I.*, denatured alcohols and esters, (P.), B., 13.
- and Fox, *D. L.*, nitrogen bases [from hydrocarbon oils], (P.), B., 345.
- Gleason, *A. W.*, and Nutt, *D. B.*, treatment oils, (P.), B., 1034.
- and Mithoff, *R. C.*, products containing pectin, (P.), B., 876.
- Osborn, *R. T.*, and Craig, *R.*, sulphonic acids and sulphonates [from petroleum], (P.), B., 182.
- and Putnam, *J. F.*, preventing corrosion of metallic objects [wire or pipes], (P.), B., 315.
- and Rutherford, *J. T.*, treatment of oil sludge, (P.), B., 1127.
- Shiffner, *W. H.*, and Holm, *M. M.*, catalytic hydration of olefines, (P.), B., 138.
- Thompson, *Harry W.*, and Rutherford, *J. T.*, hydrolysis of acid sludge [from refining of hydrocarbon oils], (P.), B., 838.
- Standard Oil Co. of Indiana, Brown, *A. B.*, and Neeley, *A. W.*, refining of aeroplane engine oil, (P.), B., 937.
- and Payne, *D. E.*, hydrogenation of oils, (P.), B., 712.
- and Payne, *E. H.*, core oil, (P.), B., 759.
- Payne, *E. H.*, and Miller, *Clarke C.*, vacuum distillation, (P.), B., 85.
- and Price, *R. H.*, hydrogenation systems [for petroleum oils], (P.), B., 10.
- Standard Oil Co. of Indiana, and Roberts, *Joseph K.*, conversion of hydrocarbon oils, (P.), B., 892.
- and Ruthruff, *R. F.*, hydrogenation systems [for petroleum oils], (P.), B., 10.
- and Wilson, *R. E.*, hydrogenation of pressure tar, (P.), B., 393.
- Standard Oil Development Co., cleansing materials, (P.), B., 348. [Inhibitors for] lubricating and similar oils, (P.), B., 441. [Blending of] petroleum and similar hydrocarbons, (P.), B., 617. Separation of waxy constituents from oils, (P.), B., 793. High-pressure lubricants, (P.), B., 794. Polymerisation products from unsaturated hydrocarbons, (P.), B., 892. Lubricating and similar oils, and greases, (P.), B., 937. [Extreme-pressure] lubricants, (P.), B., 938. Fuels suitable for high-pressure liquid fuel injection engines, (P.), B., 984. Separation of hydrocarbon mixtures, (P.), B., 1034. Oxidation products from hydrocarbons, (P.), B., 1034. Lubricating and insulating compositions, (P.), B., 1034. Oil composition suitable for flushing crank-case of an internal-combustion engine, (P.), B., 1128.
- and Baskin, *C. M.*, cold-laid pavement, (P.), B., 632.
- Becker, *A. E.*, and Davis, *W. S., jun.*, lubricating oil, (P.), B., 984.
- and Beiswenger, *G. A.*, treatment of [mineral] oil, (P.), B., 486. Treating heavy [hydrocarbon oil] residues, (P.), B., 663.
- Bird, *J. C.*, and Rosen, *R.*, separation and purification of sulphonates with ammonia, (P.), B., 345.
- Booth, *R. D.*, Coffin, *J. R.*, Tigges, *A. J.*, and Jackson & Moreland, expanding high-pressure gas, (P.), B., 579.
- Brezinski, *L. P.*, and Frolich, *P. K.*, esters, (P.), B., 138.
- and Buc, *H. E.*, purification of petroleum sulphonates, (P.), B., 984.
- and Curran, *R. A.*, treatment of asphalt, (P.), B., 180.
- Davis, *G. H. B.*, and Franceway, *J. A.*, catalytic process for producing gas rich in hydrogen, (P.), B., 10.
- and Ellis, *C.*, aqualysation [of hydrocarbons], (P.), B., 216.
- and Fischer, *H. G. M.*, regeneration of doctor sludge, (P.), B., 759.
- and Fulton, *S. C.*, resins of petroleum origin, (P.), B., 1005.
- Garner, *J. B.*, Miller, *R. W.*, and Leyden, *G. B.*, processing of hydrocarbon gas, (P.), B., 214.
- Hanks, *W. F.*, and Freyermuth, *G. H.*, preoasting of hydrogen-production catalysts, (P.), B., 187.
- and Harrington, *P. J.*, countercurrent washing [of naphtha, etc.], (P.), B., 178.
- and Haslam, *R. T.*, production of low-boiling hydrocarbons by action of water, (P.), B., 216. Hydrogen production with particular reference to hydrogenation of oils, (P.), B., 261.
- and Hopkins, *M. B.*, incorporation of oil and resinous bodies [for insulation purposes], (P.), B., 11.
- and Howard, *F. A.*, anti-freeze solution, (P.), B., 2.
- Lewis, *W. K.*, and Frolich, *P. K.*, oxidation of hydrocarbons, (P.), B., 839.
- Standard Oil Development Co., and Link, *L.*, distillation of hydrocarbon oils, (P.), B., 11.
- McIntyre, *G.*, and Ulbricht, *E. G.*, stabilising colour of naphthas, (P.), B., 1128.
- and Maverick, *G. M.*, gear lubricant, (P.), B., 394.
- and Mutter, *E.*, treatment of [liquid] hydrocarbons, (P.), B., 793.
- Nichols, *H. J., jun.*, and Kuhl, *P. E.*, [hydrocarbon] oil absorption process, (P.), B., 663.
- and O'Brien, *J. A.*, gas and liquid separator, (P.), B., 610.
- Peck, *E. B.*, and Kleiber, *C. E.*, heat treatment of [hydrocarbon] oil, (P.), B., 662.
- Ralston, *A. W.*, and Wright, *J. R.*, reclaiming of rubber and similar substances, (P.), B., 1006.
- Russell, *R. P.*, and Hanks, *W. F.*, gas rich in hydrogen, (P.), B., 452.
- and Sloane, *R. G.*, stable white oil, (P.), B., 485.
- Sloane, *R. G.*, and Wasson, *J. I.*, motor fuels, (P.), B., 181.
- Stratford, *R. K.*, and Doohan, *W. P.*, freeing [hydrocarbon] oils from sulphur dioxide, (P.), B., 136.
- Tryon, *R. W.*, and Helle, *J. O. F.*, heat exchanger, (P.), B., 2.
- and White, *A.*, aqualysis of [mineral oil-water] emulsions, (P.), B., 216.
- and Whitner, *T. C., jun.*, apparatus for countercurrent treatment of two immiscible liquids, (P.), B., 883.
- Wizevich, *P. J.*, and Whiteley, *J. M., jun.*, initiation of polymerisation reactions, (P.), B., 881.
- Standard Sanitary Manufacturing Co. See Sohn, *E.*
- Standard Telephones & Cables, Ltd., and Carter, *H. F.*, treatment of extruded metals [lead], (P.), B., 956.
- and Mildner, *R. C.*, impregnation of fibrous material [e.g., paper insulators for electric cables], (P.), B., 624.
- Wilson, *J. R.*, Acker, *J. T.*, and Hartman, *C. D.*, electron emitters [radio-valves], (P.), B., 958.
- Standel, *E. G.* See Pamfilov, *A. V.*
- Staněk, *V.*, and Kmínek, *M.*, origin of oxalates in [sugar-juice] evaporator scale, B., 1112.
- and Pavlas, *P.*, determining amides and amino-acids (harmful nitrogen) of beet [factory products], B., 201. Micro-analytical studies of synthetic sweetening materials. I. Saccharin. II. Dulcin, B., 261, 330. Influence of carbonatation scums passing the first presses on colour of [sugar] juice, B., 328.
- Stanesco, *I.* See Balanescu, *I.*
- Stanfield, *K. E.*, determination of molybdenum in plants and soils, A., 1179.
- Stangalini, *L.*, rice straw and its utilisation in the paper industry, B., 845.
- Stange Co., *W. J.*, condimentation of food products, (P.), B., 923.
- Stangenberg, *M.*, variations in fat and water content of the carp, A., 390.
- Stanier, *H.* See South Metropolitan Gas Co.
- Staniland, *E. F.*, clarification of beer, (P.) B., 520.
- Stanley, *A. R.*, soft rot and colon-typhoid-dysentery groups of bacteria. II. Physiology, A., 786.
- Stanley, *H. M.* See Distillers Co.

- Stanley, R. C., nickel and its non-ferrous applications, B., 458.
- Stanley, W. M., action of high-frequency sound waves on tobacco mosaic virus, A., 270. Isolation of a crystalline protein possessing the properties of tobacco mosaic virus, A., 1181. Virus of tobacco mosaic. III. Rates of inactivation at different pH , B., 691.
- See also Du Pont de Nemours & Co., E. I.
- Stanoyévitch, L., and Petkovitch, S., variations of ammonia in blood and urine after introduction of urease by different routes, A., 508.
- Stansel, R. H. See Reynolds, E. B.
- Stansfield, E., Lang, W. A., and Gilbert, K. C., [Alberta] fuels, B., 1122.
- Stanton, T. E., and Pauls, J. T., experiments with road mixes and surface treatments in California, B., 852.
- Stanton, T. R. See Leukel, R. W.
- Stanworth, J. See Stanworth, S.
- Stanworth, S., Clegg, J. H., and Stanworth, J., gas-fired furnaces, (P.), B., 49.
- Staples, L. W., austinite, a new arsenate mineral, from Gold Hill, Utah, A., 726. Adamite from Gold Hill, Tooele Co., Utah, A., 956.
- Stapleton, A. G. See Rooney, T. E.
- Starcewska, H., adsorptive properties of coals, B., 130.
- Stare, S., determination of invert sugar, B., 76.
- Stareck, J. E., and Taft, R., use of a modified Haring cell in detecting electrode reactions, A., 457.
- Stargardter, A. R., and Gillette Safety Razor Co., [heat]-treatment of steel, (P.), B., 314.
- Starik, I. E., and Melikova, O. S., α -particle measurements, A., 6.
- and Smagina, A. S., determination of radium in rocks and minerals by the emanation method, A., 54.
- Stark, J., condition of electrons in superconductors, A., 1196.
- Stark, J. T., and Barnes, F. F., correlation of pre-Cambrian granites by means of heavy mineral analysis, A., 1220.
- Stark, M. E., standards for predicting basal metabolism in the immediate pre-adult years, A., 1403.
- Stark, O. K., and Montgomery, M., bacteriostatic and germicidal powers of "merphenyl nitrate," B., 527.
- Starke, K. See Täufel, K.
- Starkey, R. L., production of polythionates from thiosulphate by micro-organisms, A., 126. Cultivation of organisms concerned in oxidation of thiosulphate, A., 126. Products of bacterial oxidation of thiosulphate in inorganic media, A., 537. Isolation of [soil] bacteria which oxidise thiosulphate, B., 470.
- Starkiewicz, J. See Piñkowski, S.
- Startup, C. W. See Cruickshank, E. W. H.
- Staruiguina, L. See Voitkevich, O.
- Starup, U. See Dam, H.
- Stasiak, A., stability of digitalis tinctures prepared by various methods, B., 45.
- Stassi, M. See Lombroso, U.
- Stastny, F. See Kurtenacker, A.
- Statham, F. S. See Kenner, J.
- Statham, N., Leek, T. G., and Industrial Chem. Sales Co., Inc., paper, (P.), B., 1089.
- Stather, F., and Herfeld, H., effect of neutral salts on raw hide free from proteins soluble in water and in neutral salts, B., 35. Comparative testing of leather waterproofness, B., 323. Effect of heat on vegetable-tanned leather, B., 513. Absorption of and dehydration by salt in the different layers of raw hide in curing, B., 863.
- and Lauffmann, R., effect of non-tans on tannage with vegetable tanning materials, B., 35. Characteristics of vegetable tannins. VII. Amount, rate, and stability of combination of vegetable tannins with hide substance, B., 1008.
- and Schubert, R., specific action of vegetable-tanning extracts on properties of tanned leather, B., 564.
- and Sluyter, H., fat-liquoring process. IX. Effect of chemical and physical properties of fish oils on their tendency to form resinous spews on vegetable-tanned leather, B., 469.
- See also Parker, J. G.
- Stathis, E., detection of mercury, A., 55.
- Staub, A., agglutination of *Bacillus pullorum*, A., 1520.
- See also Ruggli, P.
- Staub, H., dielectric anomalies of Rochelle salt, A., 1452.
- and Mezey, K., impairment of the heart by dinitro-compounds, A., 526.
- See also Rothschild, F.
- Staud, C. J. See Eastman Kodak Co., and Norris, J. F.
- Stauda, H., forgotten [photographic] development process, B., 575.
- See also Luther, R.
- Staudinger, H., chemistry of cellulose, A., 70. Highly-polymerised compounds. CVI. "Power of memory" of cellulose acetates. CXVII. Classification of colloids, A., 60, 1319. Sakurada's publications [on cellulose], A., 965. Rubber. II. and III, B., 113. Constitution of rubber and nature of its viscous solutions, (P.), B., 240.
- and Dreher, E., highly-polymerised compounds. CX. Constitution of polypropenylbenzene and its derivatives, A., 740.
- and Eilers, H., highly-polymerised compounds. CXV. Transformation of cellulose into polymeric-analogous cellulose triacetates, A., 1226.
- and Heuer, W. [with Husemann, E.], highly-polymerised compounds. CI. Connexions between solvation, solubility, and viscosity of polystyrenes, A., 163.
- and Husemann, E., highly-polymerised compounds. CXVI. Polystyrenes with limited swelling power. CXVIII. Viscosity of organic spheroidal colloids, A., 1229, 1319.
- and Ritzenthaler, B., highly-polymerised compounds. CIV. Addition of sulphur dioxide to derivatives of ethylene, A., 604.
- and Ritzenthaler, B. [with Kautz, S.], highly-polymerised compounds. CXIII. Cellulose in Schweitzer's reagent, A., 965.
- and Schwalenstöcker, H., highly-polymerised compounds. CXII. Determination of molecular form by viscosity measurements, A., 730.
- and Staiger, F., highly-polymerised compounds. CIX. Viscosity of polyphenyl ethers. CXI. Measurements of viscosity of paraffins, A., 728, 745.
- Staudinger, H., and Steuhofer, A., highly-polymerised compounds. CV. Viscosity measurements with carotenoids. CVII. Polystyrenes. CVIII. Viscosity of solutions of cyclic compounds, A., 611, 740.
- Staudinger, H. P., cellulose ester compositions and articles produced therefrom, (P.), B., 799.
- See also Auden, H. A., and Distillers Co., Ltd.
- Stauffer, R., Konopicky, K., and Alterra A.-G., extraction of impurities from mineral raw materials [e.g., clays, bauxite, asbestos], (P.), B., 849.
- Stauffer, W. O. See Du Pont de Nemours & Co., E. I.
- Staunton, P. J. See Bell, A. F.
- Stavnsbjerg, J. R. H., pasteurising apparatus [for bottled goods], (P.), B., 782.
- Steacie, E. W. R., enzymic sucrose inversion in heavy water, A., 43. Oxidation of ethane, A., 324. Enzymic fission of salicin by emulsion in heavy water, A., 588.
- Hatcher, W. H., and Horwood, J. F., kinetics of decomposition of gaseous glyoxal, A., 827. Kinetics of oxidation of gaseous glyoxal, A., 1327.
- Hatcher, W. H., and Rosenberg, S., kinetics of oxidation of gaseous propaldehyde, A., 308.
- and McDonald, R. D., kinetics of reaction between gaseous methyl alcohol and nitrous oxide, A., 172. Kinetics of thermal decomposition of gaseous methyl iodide, A., 587. Nitrous oxide as oxidising agent in the gaseous state, A., 1213.
- and Shaw, G. T., homogeneous unimolecular decomposition of gaseous alkyl nitrites. III. Decomposition of *n*-propyl nitrite, A., 938.
- See also Geib, K. H.
- Stead, E. A., jun. See Bryan, A. H.
- Stearn, A. E., application of quantum mechanics to certain cases of homogeneous catalysis. I. II. Enzyme action, A., 43, 533.
- Stearn, N. H., stibnite in quartz, A., 323.
- Stearns, G., and Warweg, E., phosphorus of blood. III. Phosphorus partition in whole blood and in serum, and serum-calcium and plasma-phosphatase during healing of late rickets, A., 1393.
- See also Warweg, E.
- Stearns, J. C., and Hedberg, C., comparison of absorption coefficients of different elements for cosmic rays, A., 1442.
- Stearns, L. A., codling-moth control in Delaware, B., 742.
- Steatit-Magnesia Akt.-Ges., electrical insulating materials, (P.), B., 415. Electrical insulators, (P.), B., 812.
- Stebnitz, V. C., and Sommer, H. H., improved Swift fat-stability apparatus, B., 1053.
- Stecher, J. L. See Du Pont de Nemours & Co., E. I.
- Steck, I. E., Miller, D. S., and Reed, C. I., effect of parathormone on basal metabolism of normal dogs, A., 539.
- Steck M., electron waves, A., 804.
- Stedman, D. F., fractionation of isotopic isomerides by distillation, A., 1334.
- Stedman, E., and Stedman, (Mrs.) E., relative choline-esterase activities of serum and corpuscles from the blood of certain species, A., 1416.
- Stedman, (Mrs.) E. See Stedman, E.

- Steedman, *R. T.*, seasoning of pulp wood, B., 408.
- Steel, *E. W.*, dilution and carbon treatment make salty water palatable, B., 880.
- Steel, *J. P.*, cod-liver oil treatment of wounds, A., 1271.
- Steele, *F. A.*, optical characteristics of paper. I. II. Precision opacimeter, B., 490, 1136.
- Steele, *H. K.* See *Gore, H. C.*
- Steele, *S.*, spectra and latent energy in flame gases, A., 451.
- Steenbergen, *B. van*, application of dielectric constant in chemical industry, B., 957.
- Steenbock, *H.* See *Baumann, C. A.*, and *Semb, J.*
- Steenhauer, *A. J.*, micro-copper-pyridine reaction on organic acids, A., 998.
- Steenberg, *V.*, sugar-beet slices and leaves as feeding-stuffs for cows, B., 972.
- Steenholt, *G.*, stability of ionic lattices, A., 19. Polarizability of the hydrogen molecule, A., 560, 801.
- Steer, *W.*, *Byturus tomentosus*, Fabr. IV. Control of the raspberry and loganberry beetle, 1933, B., 1013.
See also *Hey, G. L.*
- Steere, *F. W.*, and *Semet-Solvay Eng. Corp.*, recovery of waste heat in water-gas operations, (P.), B., 537.
- Stefan-Poznanski, cause of milky flecks on viscose silk, B., 398.
- Stefanopoulou, *G. J.*, and *Büding, E.*, anticoagulant action of glucose and sucrose from point of view of thermostability of properties of antispasmodic sera, A., 408.
See also *Mollaret, P.*
- Stefanovski, *V. F.*, hexamethylenetetramine and bromate methods of determining manganese in presence of iron, A., 318.
- Steffen, *E.*, conversion [hydrogenation] of oxygen-containing carbon substances, (P.), B., 180.
See also *Voorhees, B. V.*
- Steffens, *C. C.*, reaction mechanisms, A., 707.
- Steffens, *W.* See *Haupt, H.*
- Steffes, *M.*, operation of a Minette blast furnace with and without scrap metal, B., 150.
- Štefl, *J.*, and *Kunzová, H.*, ammonia content of brain during uræmia, A., 387.
- Steger, *A.*, and *Loon, J. van*, ueuhuba fat, B., 317. Properties and composition of Sumatra palm oil, B., 463. Polymerisation of fatty oils. VI. Polymerisation of China wood oil. VII. Polymerisation of ethyl linolenate. VIII. Hydrogenation of polymerised linseed and wood oils. IX. Hydrogenation of polymerised ethyl linolenate. X. Polymerisation of ethyl linolenate, A., 559, 640, 1482. Coula-seed oil, B., 859.
- Steger, *H.* See *Raisch, E.*
- Steggerda, *F. R.*, and *Essex, H. E.*, comparative study of effects of preparation of the posterior lobe of the pituitary gland on water interchange in frogs, A., 790.
See also *Amberson, W. R.*, and *Mulder, A. G.*
- Stegmann, *H.*, excitation of the nitrogen nucleus to *H*-emission by polonium α -rays, A., 910.
- Steher, and *Dittrich-Bach*, "water-solubility" of basic slag, B., 848.
- Stehlik, *V.*, and *Černý, M.*, application of the method of determining harmful amino-nitrogen in beet, B., 1158.
- Steidtmann, *E.*, travertine-depositing waters near Lexington, Virginia, A., 1477.
- Steiger, *B.*, ruthenium- and osmium-specific group in organic sulphur compounds, A., 332.
- Steiger, *M.*, synthesis of *l*-ribo- γ -ketoheptonolactone (*l*-allo-ascorbic acid), A., 1353.
- and *Reichstein, T.*, *l*-psicose (2-keto-*l*-ribohexose, ψ -fructose), diacetone-*l*-psicose, and diacetone-*l*-psicuronic acid, A., 1109.
- Steiger, *R. E.*, thermometers and apparatus for determination of points of fusion and decomposition of organic substances, A., 465.
- Steigerwald, *E.* See *Martin, L.*
- Steigmann, *A.*, relation between p_H and photographic sensitivity, A., 712. Cystine in photographic emulsions, B., 478. New fine-grain developers, B., 574. Regeneration of fixing baths, B., 575. Photographic gelatin problem, B., 783. Gelatin testing and the iodine azide reaction, B., 1009. Reactions of gelatin sensitizers, B., 1023. [Photographic] emulsion gelatin, B., 1069.
- Steik, *K. T.*, [preparation of] white oils [for textiles], B., 989.
- Steimetz, *E.*, reagents for analysis of plant sections, A., 1044.
- Stein, *A. E.*, desulphurisation of artificial filaments of viscose, (P.), B., 720.
- Stein, *E.* See *Raudnitz, H.*
- Stein, *G.* See *Alder, K.*
- Stein, *H.*, potato starch as raw material for synthetic products. II., B., 202.
- Stein, *K. F.*, effects of avian pituitary glands in salamanders, A., 412.
- Stein, *O.* See *Bruson, H. A.*
- Stein, *S. I.*, pituitary. IV. Effect of vitamin-*B* deficiency on the female albino rat, A., 1547.
- Stein, *Walter*. See *Raudnitz, H.*
- Stein, *Wilhelm*, testing for flaws, etc., in working [magnetisable] materials, (P.), B., 1148.
See also *Müller, Erich*.
- Stein & Atkinson, Ltd., and *Bandel, F. A.*, [vacuum] furnace apparatus, (P.), B., 433.
- Stein-Hall Manufacturing Co., conversion of [dextrinisation of starch in] cereals, (P.), B., 748*.
See also *Bauer, H. F.*
- Steinbauer, *C. E.*, chemical treatments for shortening rest period in tubers of Jerusalem artichoke, B., 326.
- Steinberg, *A.* See *Rowntree, L. G.*
- Steinberg, *C. Le R.*, prognosis of coronary thrombosis based on non-protein-nitrogen in blood, A., 1403.
- Steinberg, *D. S.*, propagation of the magnetic reversal wave, A., 1196.
See also *Miller, N. J.*
- Steinberg, *R. A.*, nutritional requirements of *Aspergillus niger*, A., 1166.
- Steinberg, *S.*, and *Susin, V.*, transformation of austenite in a chromium steel, B., 359.
- Steinberger, *R. L.*, ferromagnetism of iron-nickel alloys under hydrostatic pressure, A., 19.
- Steinberger, *Raymond L.*, thermodynamics of swelling, A., 300.
- Steinbrecher, *H.*, fossil resins in brown coals, A., 1347. Dependence of coal-dust explosion on nature of material, B., 5.
- Steinbrück, *R.*, apparatus for detection and determination of arsenic by the Gutzeit and Beck-Merres methods, A., 184.
- Steinbrunn, *G.* See *Freudenberg, K.*
- Steiner, *A.*, determination of fermentable sugar in muscle, A., 1397.
- Steiner, *C.*, determination of free hydroxyl groups in fatty acids and the higher fatty alcohols, B., 1054.
- Steiner, *D.*, wet-sieving for control tests in cement works, B., 726.
- Steiner, *Dora*. See *Sauer, E.*
- Steiner, *H.* See *Fink, A.*, and *Gross, P.*
- Steiner, *H. M.*, immediate and residual effects of insecticides on the white apple leaf-hopper, B., 969.
- Steiner, *K.*, variation of vapour pressure of the isotopic mixture of hydrogen with time at 20-38° abs., A., 1456.
and *Grassmann, P.*, upper limit to the ohmic resistance of superconductors, A., 1196. Current distribution in parallel smooth and linked wires at the commencement of superconduction, A., 1196. Upper limit of the thermo-electric power between superconductors, A., 1196. Effect of size of crystallite on occurrence of superconduction, A., 1196. Properties of rotating superconducting loops in a magnetic field, A., 1196.
See also *Meissner, W.*
- Steiner, *L.* See *Erdheim, E.*
- Steiner, *M.*, ecology of salt marshes in north-east U.S.A.; osmotic ratios of soils as a factor in plant distribution; ecology of osmotic values and chemistry of cell sap in halophytes, A., 671.
- Steiner, *V.* See *Bulina, J.*
- Steiner, *W.*, recombination of hydrogen ions, A., 587. Loss of hydrogen atoms on water-poisoned glass surfaces, A., 1069.
- Steingroever, *F. A.*, *Zellmann, R.*, and *Chem. Fabr. von Heyden A.-G.*, phenols from halogenated hydrocarbons, (P.), B., 396.
- Steinhäuser, *A.*, polarisation of resonance radiation of calcium and effect of weak magnetic fields, A., 1183.
- Steinhausen, *E.*, identification of homeopathic triturations, A., 462.
- Steinhöfer, *A.* See *Staudinger, H.*
- Steinhoff, *G.*, determination of imbibing power of potato meal, flour, etc., B., 824. Examination of commercial starch and refined products, B., 1112.
- Steininger, *H. M.*, vapour-phase clay treatment of cracked gasoline, B., 886.
- Steinitz, *E. W.*, nature and quality of Russian lubricating oil, B., 889.
- Steinitz, *R.* See *Stäblein, F.*
- Steinkopf, *W.*, action of Grignard reagents on aromatic sulphonyl fluorides, A., 739. Thiophen series. XXIX. Flavophen, A., 1378.
and *Jacob, Hans*, thiophen series. XXVIII. Bromo-derivatives of 3-thiitolene [3-methylthiophen], A., 354.
- Schmidt, *S.*, and *Penz, H.*, organic arsenic compounds. XVII. Polymeric phenylarsenoxide and reactions of *m*-phenylenediarsinic acid, A., 227.
- Steinmann, *A.*, occurrence of acetaldehyde in tropical fruits, B., 875.

- Steinmetz, H., measurement of, thermoluminescence, A., 602.
- Steinweden, J. B., fumigation for European earwig (*Forficula auricularia*, Linn.) in balled nursery stock, B., 327.
- Steinwehr, H. von, and Schulze, A., heat evolved in metallic transformations. II. Cobalt. III. Iron, A., 704, 922. Heat effects in transformations of cobalt, A., 922.
- Seitz, W. A. See Mouquin, H.
- Stekol, J. A., metabolism of L- and D-cystine in growing dogs maintained on diets of various protein content, A., 242. Metabolism of L- and D-methionine in adult and growing dogs maintained on diets of various protein contents, A., 779. Metabolism of naphthalene in adult and growing dogs, A., 1159.
- See also Cerecedo, L. R.
- Steller, W. R., Markley, M. C., and Bailey, C. H., diastatic activity of wheat flour. II, B., 651.
- Stelletsky, T. See Kurdjumov, G.
- Stelling, O., dependence of electrochemical properties of an element on state of aggregation. I. Potential of gallium and gallium amalgam in gallium salt solutions. II. Polarisation relations in electrolytic deposition and solution of gallium and their dependence on temperature near the m.p., A., 1325, 1463.
- Stelling, R., heat interchangers in oil refining, B., 1081. Fractionation in oil refining, B., 1101.
- Stellum, Inc., and Schermer, N. H., metal articles from iron-carbon alloys, (P.), B., 234, 313.
- Stempel, B., law of plant production and growth, B., 282. Improvement in the intensity of action of artificial fertilisers, B., 646. Detection of eucalyptus oil in pine-needle extract, B., 973.
- Stender, W. W., asbestos diaphragms [in electrolysis], B., 558.
- Andreev, P. I., Sergeev, E. A., and Lure, S. N., electrolysis of potassium chloride, B., 29.
- and Seerak, I. J., electrolysis of aqueous solutions of alkali sulphates, B., 1000.
- Stroganov, M. M., and Zivotinsky, P. B., sodium discharge potential at the mercury cathode, A., 706.
- Stene, J. See Schmidt-Nielsen, S.
- Stenfors, F. I. E., furnaces, (P.), B., 977.
- Stengel, E. See Klinger, P.
- Stenger, E., and Mutter, E., fine grain and fine-grain development. IV. Systemisation of fine-grain developers, B., 1167.
- Stenger, V. A., and Kolthoff, I. M., detection and colorimetric determination of micro-quantities of bromide, A., 835.
- See also Kolthoff, I. M.
- Stensig, S. See Heede, A.
- Stent, H. B., fertiliser effect of wood burning in the "Chitemene" system, B., 116.
- Stenvinkel, G., and Svensson, E., band spectroscopic observations of the isotopes of zinc and cadmium, A., 802.
- Stenzel, H. See Hess, K.
- Steopoe, A., influence of trass on properties of plaster. II, B., 24. Zeolitic nature of trass, B., 528. Action of aggressive solutions on hardened cement, B., 1096. Determination of mixture proportions in mortar and concrete, B., 1096.
- and Filimon, C., absorption of organic dyes on trass and application of the trass as a decolorising powder, B., 14.
- Steopoe, A., and Teodoru, H., chemical and technical study of trass cement-standard mortars, B., 23.
- and Timis, G., reactions between trass and electrolytic solutions and application to water softening, B., 1.
- Stepán, V. See Prelog, V.
- Stepánek, J. See Krauz, C.
- Stepanov, A. D. See Kirkgof, G. A.
- Stepanov, A. V., theory of practical strength, A., 19. Plastic properties of single crystals of silver and thallium halides, A., 814.
- Stepanov, D., and Marschak, F., oxidation of stannous sulphate by oxygen, A., 1082.
- Marschak, F., Balasehova, N., and Kabanova, V., solution of electrodeposits of iron-nickel alloys, A., 1199.
- Marschak, F., and Beljakova, E., electroplating with ferro-nickel, B., 729.
- See also Marschak, F.
- Stepanov, L. V., and Timokhin, A. A., pickling of iron with mineral acids in presence of regulators, B., 498.
- Stepanov, N. I., and Kornilov, I. I., solid solubility of copper in magnesium, A., 576.
- Stepanova, (Miss) E. See Skobelzyn, D.
- Stephan, C., graphited lubricating oils, B., 1032.
- Stephan, F. C., and Telegraph Condenser Co., Ltd., purification of glycols or derivatives thereof, (P.), B., 761.
- Stephan, K., rancidity and the preservation of fats and oils, B., 596. German balsam turpentine oil, B., 814.
- Stephani, G. See Sonn, A.
- Stephen, H., and Backeberg, O. G., [action of thionyl chloride on anilides, carbamides, and urethanes], A., 1359.
- Stephens, C. G., a salt-affected apricot orchard at Tea Tree [Tasmania], B., 1011.
- See also Prescott, J. A.
- Stephens, M. M., identification of types of chalcocite by use of the carbon arc, A., 1344.
- Stephenson, C. See Dameshek, W.
- Stephenson, H. P., heat treatment of carbonaceous material, (P.), B., 890.
- Stepitchev, N. P., porous [filtering] bodies, (P.), B., 434.
- Stepp, W., micro-determination of biological carbon, especially of residual carbon in blood, A., 1393.
- and Schröder, H., fate of vitamin-C in the digestive tract. I. Action of intestinal bacteria on vitamin-C, A., 1541.
- Steppuhn, O., hormone affecting metabolism and substance stimulating insulin production of the anterior pituitary, A., 1423.
- Steps, H. See Funk, H.
- Štěrbá-Böhm, J. S., and Melichar, M., rare earths. I. II [Scandium, yttrium, and lanthanum], A., 606, 714.
- Sterges, A. J. See Fraps, G. S.
- Sterkers, E., and Humbert, L. C., obtaining pure zinc oxide [from roasted blende, etc.], (P.), B., 495.
- Sterkx, M., disinfecting agents [in breweries and maltings], B., 203.
- Sterling Metals, Ltd., and Gascoigne, D. J., refractory linings for furnaces and bricks therefor, (P.), B., 902.
- Stern, A., and Wenderlein, H., optical absorption of porphyrins, A., 10, 428, 1444.
- See also Fischer, Hans.
- Stern, B., and Gilligan, D. R., effect of hypothyroidism on antidiuretic action of pressor principle of posterior pituitary, A., 1423.
- See also Ernstene, A. C., and Gilligan, D. R.
- Stern, C. See Nadson, G. A.
- Stern, E. L. See Lichtman, S. S.
- Stern, F. See Dejmek, V.
- Stern, H. J. See India Rubber, Gutta Percha, & Telegraph Works Co.
- Stern, I., and Nekrassov, N., local element effect in corrosion processes, A., 173.
- See also Nekrassov, N.
- Stern, K. See Bohn, H., and Plaut, F.
- Stern, K. G., oxidation-reduction potentials of toxoflavin, A., 407. Spectroscopy of an enzyme reaction, A., 1189. Constitution of the prosthetic group of catalase, A., 1278.
- See also Greville, G. D.
- Stern, M., preservation of raw hides and skins, (P.), B., 323.
- and Établ. Elka A.A.R.L., preservation of meat and fish, (P.), B., 123.
- Sternau & Co., Inc., S. See York, A. F.
- Sternbach, L. See Dzięwoński, K.
- Sternbaek, M. See Kunde, M. M.
- Sternberg, H. See Späth, E.
- Sterne, C. M., corrosion of air-conditioning equipment, B., 1070.
- Sterne, T. E., equilibrium theory of abundance of the elements, A., 8. Relative abundances of elements of even and odd mass number and atomic number, A., 141. Nuclear reactions at stellar temperatures, A., 1297.
- Sterner-Rainer, L., alloys to replace 14-carat gold, B., 552. Coloured gold alloys with palladium, B., 771.
- Sterner-Rainer, R., and Amer. Lurgi Corp., aluminium-silicon alloy with 0.001—0.1% of phosphorus, (P.), B., 66.
- Sternheimer, R., action of thyroxine on carbohydrates and proteins in the liver, A., 127.
- Sterns, R. W., use of white-water in the newsprint mill, B., 399.
- Sterrett, R. R. See Clark, G. L.
- Stessel, T. A. See Avtonomova, E. S.
- Stetson, R. P. See Chew, W. B.
- Stetter, G., registration of the ionisation curve of a single α -particle, A., 1295.
- and Jentschka, W., specific ionisation of single α -particles, A., 910.
- and Sehnlfmeister, J., investigation of corpuscular rays with a double [ionisation] chamber and two valve electrometers, A., 278.
- See also Ortnr, G.
- Stetzuro, Z. See Salkind, J.
- Steuart, D. W., acids of cider, B., 376. Butyrised fats: butter aroma, B., 462. Cider, B., 1065.
- Steubing, W., and Redepenning, W., electric and magnetic effect on helium lines for perpendicularly crossed fields, A., 1437.
- Steude, R. See Boas, F.
- Steudel, H., nucleic acids of the pancreas. I. Thymonucleic acid, A., 646.
- Stevens, A. H. See Pure Calcium Products Co.
- Stevens, A. L., and Stevens Corp., A. L., heat-treating furnace, (P.), B., 609.
- Stevens, C. L., and Pierce, H. S., heat treatment of [high-speed steel] articles, (P.), B., 504.
- Stevens, D. F., and Stevens, R. P., de-airing of floor tile, B., 1044.

- Stevens, D. S., high-intensity discharge tube, A., 466, 1341.
- Stevens, H. P., and Parry, E. J., deodorisation of vulcanised rubber, B., 34.
- and Stevens, W. H., rubbione, B., 600.
- Coating and impregnation of textiles with [rubber] latex, B., 945.
- Stevens, W. H., and Donald, M. B., rubber in lubricants, B., 791.
- Stevens, W. H., and Heaton, N., rubber in paints, B., 814.
- See also Rubber Producers Research Assoc., and Stevens, W. H.
- Stevens, J. L., and Hatfield, K. G. S., dispersions of combustible solid in oils, (P.), B., 538.
- Stevens, P. G., action of organomagnesium halides on $\alpha\beta$ -unsaturated aldehydes, A., 963.
- Stevens, R. E., alkalinity of silicate minerals, A., 322.
- See also Wells, R. C.
- Stevens, R. P. See Stevens, D. F.
- Stevens, S. G. E., microscopical examination of herbs, B., 43.
- Stevens, T. G., chemical compounds [zinc sulphide and barium hydroxide], (P.), B., 187.
- Stevens, T. O. See Haywood, C.
- Stevens, T. S., derivatives of *o*-piperonal, A., 860. Protopine and allied alkaloids. II. New synthesis of the berberine ring-system, and of a ring-homologue of the aporphine alkaloids, A., 875.
- See also McGeoch, (Miss) S. N.
- Stevens, W. E., [determination of] cotton maturity, B., 843.
- Stevens, W. H., and Stevens, H. P., plastics based on rubber, with special reference to rubbione, B., 1055.
- See also Stevens, H. P.
- Stevens Corporation, A. L. See Stevens, A. L.
- Stevenson, E. C., and Johnson, T. H., coincidence counter studies of variation of intensities of cosmic-ray showers and vertical rays with barometric pressure, A., 803.
- See also Street, J. C.
- Stevenson, E. P. See Carpenter, J. B., jun., and Richardson Co.
- Stevenson, T. See Bennet, R.
- Stevenson, T. M. See Kirk, L. E.
- Stevenson, W. W., high-frequency induction furnace in metallurgical research laboratory, B., 150. Occurrence and determination of oxygen in steel, B., 728.
- See also Swinden, T.
- Stevinson, M. R., and Hamilton, C. S., catalytic reduction of nitroarylsarinic acids, A., 1139. Arsenated phenoxethanols [isopropanols], A., 1389.
- Steward, W. B., and Nielsen, H. H., infrared absorption spectrum of silane, A., 914.
- Stewardson, E. A., dissociation of nitrous oxide in high-frequency glow discharge, A., 46.
- Stewart, A., and Bunbury, H. M., industrial applications of colloidal electrolytes, B., 296.
- See also Imperial Chem. Industries.
- Stewart, A. B. See Ogg, W. G.
- Stewart, C. P., Dickson, J. P., and Gaddie, R., determination of lactic acid in muscle, A., 232.
- and Hendry, E. B., determination of total fatty acids in blood, A., 1000. Phospholipins of blood, A., 1142.
- See also Clark, A. J., and Gaddie, R.
- Stewart, F. S. See Du Pont de Nemours & Co., E. I.
- Stewart, J. R., oil index, B., 159.
- Stewart, K. See Emelius, H. J.
- Stewart, L. C. See Dow Chem. Co.
- Stewart, (Miss) M. M., keeping quality of haddock from cold storage, B., 476.
- Stewart, O. J., and Young, D. W., action of molten lithium salts on glass, A., 713.
- Stewart, P. A. See Heilbron, I. M., and McKenzie, A.
- Stewart, R., and Spencer, V. E., fertilisation of [sub]soil, (P.), B., 283.
- Stewart, R. F. See Dickinson & Co., Ltd., J.
- Stewart, T. D., and Weidenbaum, B., photochlorination of pentane, A., 1332.
- Stewart, W. D. See Arthur, J. M.
- Stewart, W. W., and Maass, O., vapour density of sulphur dioxide, A., 22.
- Steyn, D. G., plant poisoning in stock and the development of tolerance, A., 657. Effect of sulphur on merino sheep: safe dose of sulphur for cattle, A., 1413. Diagnosis of hydrocyanic acid and arsenical poisoning under field conditions, A., 1413.
- Stiavelli, L., autogenous welding of aluminium and magnesium, and their alloys, with special fluxes, B., 808.
- Stich, V. See Bergauer, V.
- Stichnoth, O. See Wittig, G.
- Stichting voor Materialonderzoek, painting of iron constructions, B., 160.
- Stickland, L. H., metabolism of strict anaerobes. II. Reduction of proline by *Cl. sporogenes*. III. Oxidation of alanine by *Cl. sporogenes*. IV. Reduction of glycine by *Cl. sporogenes*, A., 537, 664.
- Stickney, F. S. See Westinghouse Electric & Manufg. Co.
- Stieber, A. See Freymann, R.
- Stiehler, R. D., and Huffman, H. M., thermal data. IV. Heats of combustion of adenine, hypoxanthine, guanine, xanthine, uric acid, allantoin, and alloxan. V. Heat capacities, entropies, and free energies of adenine, hypoxanthine, guanine, xanthine, uric acid, allantoin, and alloxan, A., 1324.
- Stienstra, F. See Backer, H. J.
- Stiepel, C., apparatus and method for colorimetry of fats and oils, B., 68. Testing soap [for rate of solution and foaming], B., 462. Technical possibility of preparation of [artificial] "Leim-fetten," B., 559. "Trolhetta" oil in the liquefaction and superfatting of liquid soaps, etc., B., 597.
- Stierstadt, O., crystal structure and electrical properties. V. Conductivity surfaces of bismuth crystals. VI. The eight principal parameters of electrical conductivity of bismuth single crystals in magnetic fields, A., 567, 1062.
- Stijns, J. H., chlorine in coal and attack of oven-chamber walls by salts, B., 789.
- Stiles, W., and Rees, William J., toxic action [on plants]. IX. Toxicity of organic acids of the formic acid series, A., 674.
- Still Ges.m.b.H., C., operation of retorts and chamber ovens, (P.), B., 87. Cracking of hydrocarbons by pressure heating in the liquid phase, (P.), B., 616. Coke ovens, (P.), B., 1082.
- Stillner, M., apparatus for rapid determination of surface tension and effectiveness of capillary-active substances, A., 599.
- Stillner, W. See Engelhard, H.
- Stillger, A. A., Fluor, P. E., and Fluor Corp., Ltd., cooling tower, (P.), B., 2.
- Stillman, A. L. See Zwayer, E. B. A.
- Stillman, R. C., and Reed, R. M., Cuban palmiche nut oil, B., 276.
- Stillwell, C. W. See Bancroft, W. D.
- Stillwell, F. L., zinc-lead lode at Rosebery, Tasmania, A., 190.
- Stilson, A. E., incineration of sewage solids, B., 431.
- Stimson, H. F. See Mueller, E. F.
- Stindt, F., separation of solids from liquids, (P.), B., 1075.
- Stine, W. E., and Lincoln Electric Co., arc-welding, (P.), B., 682.
- Stiner, H., treatment of incoming supplies as a safeguard against insect pests, B., 251.
- Stintzing, H., polymorphism from viewpoint of Röntgen investigation. II. Polymorphism and atomic structure of elements; polymorphism of inorganic compounds, A., 1449.
- Stipa, V. See Jaumann, J.
- Stirm, K., and Rouette, P. L., effect of heat on wool fibre, B., 1087.
- Stirn, F. E., Elvehjem, C. A., and Hart, E. B., seasonal variations in physical properties and nutritive value of cow's milk-serum, B., 872.
- Stirton, A. J. See Groggins, P. H.
- Stix, E. See Scholl, R.
- Stock, A., effect of mercury vapour on the upper air passages, A., 1160.
- and Cucuel, F., absorption and distribution of mercury in animals, A., 247.
- and Degea A.-G. (Auerges.), purification of air vitiated with mercury vapour, (P.), B., 1072.
- Stock, E., Niger oil, B., 732. Resins. XIX. Fiji Island copal, B., 1103.
- Stockelbach, F. B., and Fries, H. F., phenol derivatives, (P.), B., 940.
- Stocker, K., and Heil, W., action of basic slag in two meadowland manurial trials, B., 566.
- Stockhausen, F., the "Elmocid" process [of disinfection], B., 704.
- and Silbereisen, K., yeast gum. I. Determination in yeast. II. Gum content and its significance in yeast, A., 1281; B., 649.
- Stockholm Superfosfat Fabriks Aktiebolaget. See Olsson, J. T.
- Stockholms Benmjölsfabriks Aktiebolaget, glue films, (P.), B., 115.
- Stockmair, W. See Kohrausch, K. W. F.
- Stockman, R., toxic material in *Lathyrus* peas, A., 117.
- Stockowna, J. See Krause, Alfons.
- Stockton, M., and Dicalite Co., heat treatment of diatomaceous earth [for use as filter-aid], (P.), B., 1025. Introduction of comminuted material into a fluid stream, (P.), B., 1026. Blending and air-separation of diatomaceous earth powders, (P.), B., 1026. Calcination of diatomaceous earth, (P.), B., 1043.
- Stoddard, K. B., direct and fluorescence excitation of the K level in thick copper targets, A., 138. Direct and fluorescence excitation of the K level in thick targets of gold, A., 1293.
- Stoddart, E. M., oxygen afterglow, A., 271.
- Stodd, W., pressed materials impregnated with synthetic resins for bearings, B., 385.
- Stöcke, K., technical properties of roofing slates and their determination particularly as regards weather-resistance, B., 547.

- Stoeckel, F. See Rothé, E.
- Stoecker, J., [slag-granulation process of the Bochum Verein, with particular reference to utilisation of the water medicinally, B., 62.
- See also Grethe, K.
- Stöckl, E., effect of active gonadotropic substances from pregnancy urine on collum carcinoma, A., 885.
- Stöckli, A., composting and manurial trials with dried hop residues, B., 639. Artificial farmyard manure, B., 778.
- Stoeckly, J. J., Brötz, A., and North American Rayon Corp., [untwisted viscose] artificial filaments, (P.), B., 1138.
- Stöhr, R., effect of a diet extremely low in sodium chloride on composition of urine and blood and on blood-volume in healthy persons, A., 892. Antiglyoxalase, A., 1279. Action of methylglyoxal on acetoacetic acid. V. Effect of the ketol on respiration of surviving tissue, A., 1412.
- Støren, R., plate-like crystals of native silver from "Gottes Hülfe in der Not" mine, Kongsbergfeltet [Norway], A., 1477.
- Störmer, I. See Harder, R.
- Störmer, R. See Holm, R.
- Stoerr, E. See Rohmer, P.
- Stoess, U., influence of calcium on the growth of micro-organisms, A., 535.
- Stoesser, W. C. See Dow Chem. Co.
- Stötter, mothproofing materials for textiles, B., 670.
- Stohlman, E. F. See Smith, M. I.
- Stoicoevici, E., crystallography of complex salts, A., 1060.
- Stokes, A. J., Howlett, J. W., and Roberts, M. V., metal [cast iron] for casting purposes, (P.), B., 63.
- Stokes, J. S. See Novotny, E. E.
- Stoklasa, J., physiological action of potassium on vital processes of chlorophyll-containing and chlorophyll-free cells, A., 797. Decomposition of rock phosphate by root excretions of individual cultivated plants, B., 566.
- Stokstad, E. L. R. See Almquist, H. J., and Givens, J. W.
- Stoldt, W., detection of short heating of milk, B., 426.
- Stoll, G., chemical constitution of the fat of the subcutaneous connective tissue in man. I. Liquid and solid fatty acids in different periods of life. II. Liquid and solid fatty acids in patients affected with benignant and malignant neoplasm, and by cancerous cachexia. III. Cholesterol. IV. Acid and saponification values. V. Iodine value of fat in different periods of life. VI. Iodine value of fat in patients affected with benignant and malignant neoplasm, and by cancerous cachexia, A., 1264.
- See also Mazza, F. P.
- Stoliarova, A. A. See Maslova, A. L.
- Stolk, D. van, and Pénaux, H., corpus luteum hormone, A., 666, 791.
- Stoll, A., scilla and digitalis glucosides, A., 735. Digitalis glucosides, A., 1355.
- and Burekhardt, E., ergobasine, a water-soluble alkaloid from the ergot of Seigle, A., 995.
- and Hofmann, A., cardiac glucosides. VIII. Transformation products of scillaren A, A., 330.
- Stoll, A., Hofmann, A., and Helfenstein, A., cardiac glucosides. XI. Identity of a-scillanic acid with allocholan acid, A., 754.
- Hofmann, A., and Kreis, W., cardiac glucosides. X. Hydrogenation of scillaren-A and physiological tests of scillaren derivatives. XII. Glucosides of *Digitalis* leaves, A., 609, 1416.
- Hofmann, A., and Peyer, J., cardiac glucosides. XIII. Empirical formula of scillaridin A and its derivatives, A., 1355.
- and Kreis, W., cardiac glucosides. IX. True glucosides of *Digitalis purpurea*; purpureagluside-A and -B, A., 330.
- See also Ruggli, P.
- Stoll, M., and Gardner, R. E., polymembered heterocyclic compounds. VI. Preparation of pure ambrettolide; preparation of the lactones of λ -hydroxystearic acid and ν -hydroxypentadecic acid, A., 65.
- and Rouvé, A., kinetic studies of the cyclisation problem, with regard to preparation of lactones with musk and amber odours, A., 960. Polymembered heterocyclic compounds. VIII. Polymembered mono- and poly-lactone rings, A., 1351.
- Stolzenbach, C. F. See Morgan, J. J.
- Stone, G. C. H., dialysing large quantities of protein solution, A., 369.
- Stone, J. B., limonite deposits at the Orient mine, Colorado, A., 60.
- Stone, J. F. S., and Johnson, N. K., production of coloured smokes, (P.), B., 255.
- Stone, W. G., distillation, (P.), B., 482.
- Stone & Co., Ltd., J., and Empson, A. W., centrifugal treatment of liquids, (P.), B., 50.
- Stonehill, H. I. See Partington, J. R.
- Stoner, E. C., thermodynamics of magnetisation, A., 435.
- Stoop, R. See De Jong, H. G. B., and Machebauf, M. A.
- Stopes, M. C., classification of coals, A., 957. Petrology of banded bituminous coal, B., 258.
- Stora, (Mlle.) C., unsaturated nature of dyes and photovoltaic phenomenon, A., 429. Physico-chemical study of electrodes photosensitised with dyes, A., 586. Action of gases (H_2 , N_2 , O_2) on dye photo-cells, A., 682.
- Storch, H. H., dependence of methano-oxygen low-pressure explosion limit on nature of reaction vessel surface, A., 709. Activity and activation energy in heterogeneous catalysis of gas reactions, A., 1209.
- and Montgomery, C. W., equation for hydrogen-oxygen explosion limits, A., 172.
- See also Atkinson, R. G., and Kassel, L. S.
- Storch, K., and Wenzel, I., determination of methoxyl groups in wood, B., 844.
- Storey, H. H., photodynamic action of methylene-blue on virus of a plant disease, A., 269.
- Storfer, E., heterogeneous catalysis. I. Activated adsorption of hydrogen on carbon. II. Graphite and diamond as adsorbents and catalysts, A., 696, 1209. Drop reaction for ferrieyanide, A., 838.
- See also Walter, Georg.
- Story, B. W. See Fuller, E. W.
- Story, Le R. G. See Bennett, H. T.
- Stott, (Miss) E. See Speakman, J. B.
- Stott, L. B. See Pagel, W.
- Stott, V. H., modification of Carpenter and Elam's method of producing single crystals of aluminium by deformation and annealing, A., 1089.
- Stotz, H., and Brüggemann, H., digestibility of crude fibre of different kinds of barley by hens, B., 972.
- See also Mangold, E.
- Stouff, intensified combustion and super-charged furnaces, B., 1123.
- Stoughton, R. W., Fries reaction with α -naphthyl esters, A., 484.
- See also Lamson, P. D.
- Stout, A. W., and Schuette, H. A., apparatus for vacuum distillation, A., 59.
- Stout, L. E., and Agruss, B., electrodeposition of ternary alloys of cadmium, zinc, and tin, B., 233.
- and Erspamer, A., electrodeposition of tin and its alloys. I. Effect of addition agents on deposition of tin from alkaline stannate baths, B., 809.
- Stoves, J. L. See Clark, C. H. D.
- Stowe, H. F. See Hazell, E.
- "Straba" Strassenbaubedarfs-A.-G., and Sommer, A., pulverulent hydraulic binding medium, (P.), B., 951.
- Stracener, C. H., insects of stored rice in Louisiana and their control, B., 250.
- Strachan, C., interaction of atoms and molecules with solid surfaces. II. Evaporation of adsorbed atoms, A., 1070.
- See also Lennard-Jones, J. E.
- Strachan, C. C. See Atkinson, F. E.
- Strachan, J., flocculation in papermaking, B., 399. Nature of colloidal water in papermaking, B., 447. Chemical residues in paper, B., 623. Hypochlorite bleaching of E.-B. [easy-bleaching] sulphite pulp, B., 764.
- and Davies, W. L., vegetable parchment and wrapping materials for food, B., 16.
- Strachan, J. G., [effect on conductivity of] ageing of a mica surface, B., 507.
- Strachova, G. See Lepin, L.
- Strack, E., Geissendörfer, H., and Neubaur, E., choline or acetylcholine content of human placenta, A., 233.
- and Schwaneberg, H., preparation of diamino-butanones. IV. Gold diamine compounds, A., 1227.
- Wördehoff, P., Neubaur, E., and Geissendörfer, H., choline, acetylcholine, and carnitine content of muscle, A., 1003.
- Straele, L. van de, citracono- and mesacononitriles, A., 737.
- See also De Wolf, J.
- Strafford, N., and Crossley, H., determination of small amounts of sulphur in certain organic compounds, A., 639.
- Strain, H. H., *m*-nitrobenzohydrazides, 2,4-dinitrophenylhydrazones; separation of hydrazones by adsorption, A., 743. Carotene. IX. Carotenes from different sources and some properties of α - and β -carotene, A., 1434.
- and Dore, W. H., polymerisation of di-hydroxyacetone, A., 198.
- Strain, L. H. See Echberg, A. F.
- Strain, W. H. See Norris, J. F.
- Strait, L. A. See Jenkins, F. A.
- Straka, L. E., and Oesper, R. E., oxidation-reduction indicators for use with dichromate, A., 56.
- Straka, R. P., and James, L. H., frozen vegetables, B., 652.

- Straňák, F., Blatný, C., and Klečka, A., vine mosaic, B., 168.
- Stranathan, J. D., dielectric constant of water vapour, A., 1304.
- Strandell, B., influence of exercise on blood-sugar, especially in connexion with glucose ingestion, A., 110.
- Strang, J. M., McClugage, H. B., and Brownlee, M. A., metabolism in under-nutrition, A., 1013.
- Strange, E. H., and Kane, T., alkyl chlorides and bromides from olefines or mixtures containing olefines, (P.), B., 1129.
- Stranski, I. N., and Kaishev, R., crystal growth and nucleus formation, A., 816. Equilibrium form and growth form of crystal, A., 1059.
- See also Kaishev, R.
- Stransky, B., action of mineral water on composition of blood. IV. Karlsbad water and serum-anions, A., 1161.
- Strashesko, D. N. See Fomin, S. V.
- Strassen, H. zur, stabilities of aluminates, A., 1204.
- See also Schwiete, H. E.
- Strasser, E. See Weissberger, A.
- Strassmann, F. See Hahn, O.
- Strassner, E. A. See Urban, F.
- Stratford, C. W., heating and fractionation of hydrocarbon oils, (P.), B., 793. Heating of hydrocarbon oils, (P.), B., 794.
- and Stratford Development Corp., fractionating process [for hydrocarbon oils], (P.), B., 11. Refining of hydrocarbon oil, (P.), B., 794.
- Stratford, H. K., and Stratmore Co., built-up abrasive element, (P.), B., 23.
- Stratford, R. K. See Standard Oil Development Co.
- Stratford, W. M. See Texas Co.
- Stratford Development Corporation. See Stratford, C. W.
- Strating, J. See Backer, H. J.
- Stratmore Co. See Stratford, H. R.
- Stratta, R., diastatic power of Italian flours, B., 1114.
- Stratton, F. J. M. See Beer, A., and Butler, C. P.
- Straub, F. B., significance of fumaric acid in respiration of animal tissues. IV. Micro-determination of fumaric acid and its application, A., 1406.
- Straub, H. W. See Wood, R. W.
- Straub, J., composition of ash of thyroid gland and goitre, A., 1527.
- and Hirsch, P., determination of freshness of bread, B., 377.
- and Lerner, M. M., cheese poisoning, B., 571.
- Straube, G., and Hofmann, R., normal urea concentration in blood and cerebrospinal fluid, A., 641.
- Straumanis, M., growth of magnesium crystals, A., 285.
- and Cirulis, A., yellow cuprous oxide, A., 1332.
- and Mellis, O., precision measurements by the Debye-Scherrer method, A., 685.
- Straup, D., and Cohn, E. J., physical chemistry of amino-acids, peptides, and related substances. V. Influence of aminoacids, carbamide, and alcohol on the velocity constants of chemical reactions, A., 1467.
- Strauss, E. See Bauer, Hugo.
- Strauss, F. See Helferich, B.
- Strauss, J., and Mahin, W. E., nitriding characteristics of chromium-molybdenum-vanadium steels, B., 458.
- Strauss, K., hypervitaminosis-A, A., 1174.
- Strauss, M. See Harrop, G. A.
- Strauss, M. B. See Buell, M. V.
- Strauss, P., are the [photographic] emulsion and developer alone determinative of fine grain? B., 925.
- Strauss, R., cells for the electrolytic chlorine-alkali process, B., 316. Improvement of technical fats and oils, B., 508. Preparation and application of artificial waxes, B., 560. Bleaching of technical fats and oils, B., 958.
- Strausser, P. W. C., Brenner, A., and Blum, W., accelerated tests of nickel- and chromium-plating on steel, B., 192.
- Straw Fibres, Ltd., and Tiraferri, L. R., degumming of decorticated fibres, tow, and similar material, (P.), B., 350. [Saponified] casein, (P.), B., 365.
- Strecker, W., and Mahr, C., tellurium nitride, A., 181.
- and Schwarzkopf, H. E., nitrogen selenide, A., 181.
- Streeck, R. See Helferich, B.
- Streif, G. M., pH in blood of Europeans in temperate zones and in that of inhabitants of the tropics, A., 1143.
- Street, J. C., and Woodward, R. H., counter calibration and cosmic-ray intensity, A., 143.
- Woodward, R. H., and Stevenson, E. C., absorption of cosmic-ray electrons, A., 1050.
- Street, O. E. See Morgan, M. F.
- Streeter, H. W., limits of pollution loadings for water-purification systems, B., 336. Measures of natural oxidation in polluted streams. I. Oxygen-demand factor. II. Re-aeration factor and oxygen balance, B., 928. Limiting standards of bacterial quality for sources of purified water supplies, B., 1071.
- Streets, H. See Hale, W. J.
- Strelnikov, A. N., and Mirlis, D. I., corrosion of iron in contact with the boundary: electrolyte-organic compound (petroleum and benzene), B., 727.
- Streitzov, V. See Borsuk, V.
- Strezynski, G. J. See Aktieb. Separator-Nobel.
- Strich, C. See Rahmer, H.
- Strieker, R. E., origin and determination of copper in [vegetable] tannin extracts, B., 469.
- Strickhouser, S. I., and Naugatuck Chem. Co., composition for coating rubber, (P.), B., 241.
- Stricks, W. See Abel, E.
- Striebich, H. See Schwarz, R.
- Strieek, F., effect of vitamin-C on metabolism, A., 793.
- Striganov, A. P. See Baschulin, P. A.
- Strigel, A. See Fingerling, G.
- Stringfield, G. H., and Salter, R. M., differential response of maize varieties to fertility levels and to seasons, B., 566.
- Stringham, W. S. See Gen. Chem. Co.
- Stritar, J. See Osburn, O. L.
- Stritar, M. J., biochemical triangle, A., 603.
- Strobel, C. J., and St. Clair Rubber Co., artificial board, (P.), B., 609.
- Strobel, E. See Fischer, H.
- Strobel, F. See Weygand, C.
- Strock, L. W., determination of small quantities of arsenic (determination of arsenic in iron ore, soot, etc.), A., 184. Distribution of selenium in nature, A., 843.
- Ströbele, R. See Kuhn, R.
- Strömsnäs Jernverks Aktiebolaget, iron alloy for production of rolls, (P.), B., 1147.
- Strøyberg, J. See Christensen, E. V.
- Stroganov, M. M. See Stender, W. W.
- Strohecker, R., formation, origin, and distribution of vitamin-C in plant tissues, A., 1176. Brown milk, B., 604. Saponification curve of fats in alcoholic solution and its importance for analytical evaluation of fats, B., 858.
- Vaubel, R., and Breitwieser, K., step-photometric determination of silicic acid and its application to water and mineral water, A., 1472.
- Strom, C. O. See Wehrle, P. W.
- Stromberg, A. See Karpatschev, S.
- Stromberg, G., dispersing and condensing tendencies in a viscous, compressible gas, A., 1065.
- Strong, F. M. See Knechtges, O. J., and Kroeker, E. H.
- Strong, H. M. See Knauss, H. P.
- Strong, J. See Gaviola, E.
- Strong, J. G. See Poe, C. F.
- Strong, L. C. See Gardner, W. M.
- Strong, R. P., importance of ecology in relation to disease, A., 1525.
- Strosacker, C. J. See Dow Chem. Co.
- Struck, H. C. See Rappaport, B. Z.
- Struck, P., corrosion protection [of iron] by paints, B., 238.
- Strücnk, G. von. See Kappen, H.
- Strukov, I. T., condensation of *p*-phenetidine hydrochloride with epichlorohydrin, A., 614. 6-Methoxy-8-quinolyl ethyl ketone, A., 990. 8-Amino-6-methoxy-quinoline, A., 990.
- Strukova, E. See Puchkovski, B.
- Strupl, M. See Neuwith, F.
- Strupp, E. See Kalb, L.
- Struss, E. F. See Vernon, C. C.
- Strzyszyński, M., detection of traces of nickel in hydrogenated fats, B., 508.
- Struve, K., red fungus [on preserved fish], B., 652.
- Strzemienska, M., relation between coloration of alkaline extract of soil and its content of lignin-humic complex, B., 115.
- Strzyzowski, C., detection of barbital in human viscera, A., 118.
- Stuart, C. A., heterophilic antibodies in infectious mononucleosis, A., 1395.
- Stuart, E. H., and Bibbins, F. E., stabilisation of fluid extract of ergot, B., 173.
- and Lilly & Co., E., ephedrine ethylmercurithiosalicylate, (P.), B., 206.
- Stuart, F. E., trend of modern taste and odour control [in water supplies], B., 527.
- Stuart, H. A., and Higgins, G. M., rhythmic changes in the foetal liver after feeding, A., 1397.
- Stuart, H. A. (Königsberg), models for demonstration of exact space occupied by molecules, A., 150. New molecular models, A., 432.
- and Volkmann, H., optical anisotropy, form, and inner movements of organic molecules, A., 148.
- Stuart, J. F. W. See Holt, T. W.
- Stuart, K. E., and Hooker Electrochem. Co., apparatus for proportional determination, (P.), B., 388.
- Stuart, L. S., morphology of bacteria causing reddening of salted [raw] hides, B., 644. Production of lipolytic and depilating enzymes by the *Aspergillus flavus-oryzae* group, B., 686.

- Stuart, L. S., and Frey, R. W., experiments with salt treated to increase its hide-curing ability, B., 114. Non-parasitic eczema damage to hides and leather, B., 513.
- See also Balls, A. K.
- Stuart, M., and Try, A. G. L., deoxygenation of oxygen-containing organic compounds [phenols], (P.), B., 183.
- Stuart, N. W., determination of amino-nitrogen in plant extracts, A., 906.
- Stubblefield, H. I. See Reid, P. E.
- Stubbs, A. E. See Dakin, H. P., and Fairbrother, F.
- Stubbs, J. R., Hortvet f.-p. process for examination of milk: correction factors and influence of stirring. I.—III., B., 475, 570. Modified Hortvet apparatus and true f.p. of milk, B., 1115. Heat-exchange in the cryoscopes of Hortvet and Monier-Williams for determination of f.p. of milk, B., 1115.
- Stuckert, G. V., modifications of periodic precipitates of the Liesegang type, A., 823.
- Stuckert, L. See Meier, F. W.
- Stuckey, J. L., North Carolina talc deposits, A., 725. Origin of cyanite, A., 954.
- Studer, A. See Goldstein, H.
- Studer, F. J., and Williams, W. D., Hall effect in sodium, potassium, and caesium, A., 572.
- Studiengesellschaft für Faserveredlung m.b.H., rendering woolen or other animal hair textiles repellent to water, (P.), B., 848.
- Stüber, C., transport of electricity through phase boundaries: glass-gas or vapour. II. Electrolytic introduction of hydrogen, nitrogen, and potassium into a glass diaphragm, and electrolytic transport of sodium through a glass diaphragm, A., 705.
- Braida, A., and Jander, G., colour and molecular state of telluric acid and alkali tellurates in aqueous solutions of various [H⁺], A., 444.
- See also Manegold, E.
- Stueckelberg, E. C. G., relativistic invariant perturbation theory of the Dirac electron. I. Scattered and retarded radiation, A., 143.
- Stücklen, H., and Carr, E. P., metastable ²D level of the nitrogen atom, A., 1.
- Stiwe, W., volumetric determination of fatty acids in soaps, B., 683.
- Stuhlman, O., jun., electrodeless discharges in gases, A., 800.
- Stuhr, E. T. See Drake, M. E., and Lee, D. K.
- Stulz-Sickles Co. See Payne, B. H.
- Stump, H. E., magnesium carbonate, (P.), B., 1092.
- Stumper, R., kinetics and catalysis of decomposition of calcium hydrogen carbonate in aqueous solution, A., 42. Physico-chemical investigations of calcium carbonate deposition from water, B., 432.
- Stumpf, K. E. See Traube, W.
- Stumpf, L. F. See Bassett, L. G.
- Stupnikov, N. See Rodionov, S.
- Stupp, C. G. See Barrett Co.
- Sturgis, B. M. See Julian, P. L.
- Sturgis, C. C., Isaacs, R., Goldhamer, S. M., Bethell, F. H., and Farrar, G. E., blood, A., 999.
- Sturgis, M. B. See Fieger, E. A.
- Sturm, A., iodine metabolism. VII. Effect of the mid-brain and the pituitary on iodine metabolism, A., 259.
- Sturm, A., Plötner, K., and Maass, K., iodine in blood, A., 1518.
- Sturm, B., Geiger counter applied to light measurements, A., 676.
- Sturtevant, J. M., orientation effects in bimolecular reactions, A., 827.
- Sturtevant, T. J., and Sturtevant Mill Co., air separator, (P.), B., 83, 532.
- Sturtevant Co. See Hanson, M. E.
- Sturtevant Engineering Co., Ltd., and Ardill, W., maturing of paper, (P.), B., 1041.
- and Wagner, H. W., electrostatic precipitating plant [for gases], (P.), B., 67.
- Sturtevant Mill Co., and Doyle, W. T., hydration of cellulose pulp, (P.), B., 800*.
- See also Sturtevant, T. J.
- Stutz, G. F. A., Elm, A. C., and New Jersey Zinc Co., [lithopone] paint, (P.), B., 914.
- and New Jersey Zinc Co., pigments, (P.), B., 367.
- See also New Jersey Zinc Co.
- Stuurman, J., oxidation velocities of unsaturated hydrocarbons with peracetic acid in acetic acid solution, A., 828.
- Styer, C. A. See Westinghouse Electric & Manufg. Co.
- Style, D. W. G. See Barak, M.
- Styles, B. J. See Beardsley, W. J.
- Su, Y. F. See Chang, K. C.
- Subbaramaiya, D. S., dielectric constants of liquids and liquid mixtures, A., 283. Depolarisation of Tyndall scattering in colloids. I., A., 821.
- Subbaraya, T. S., band systems of mercury, A., 3. Band spectrum of cadmium, A., 555. Band spectrum of zinc, A., 799. Spectrum of trebly-ionised zinc, A., 1291.
- Subkova-Gitler, S. R. See Zharebov, L. P.
- Subkow, P., continuous manufacture of carburetted water-gas, (P.), B., 758.
- and Union Oil Co. of California, cup grease, (P.), B., 733.
- See also Gard, E. W.
- Subrahmaniam, C. A. See Baker, W.
- Subrahmaniam, T. V., insecticidal properties of indigenous vegetable fish poisons, B., 118. Report of entomology, B., 472.
- Subrahmanian, V., Narayanayya, Y. V., and Bhagvat, (Miss) K., determination of carbon in soils, B., 470.
- See also Bhagvat, (Miss) K., Bhaskaran, T. R., Das Gupta, H. P., Iyer, C. R. H., Narayanayya, Y. V., Rau, R. H. R., Siddappa, G. S., and Sreenivasan, A.
- Subramaniam, K. C. See Rao, S. R.
- Subramanian, K. S. See Rao, B. S.
- Suchanova, N. G. See Serb-Serbin, P. V.
- Suchanovski, S. I., and Roginskaja, E. V., determination of formic, acetic, propionic, and oleic acids, A., 876.
- Sucharda, E., and Kuczyński, H., preparation of mesitylene, A., 334.
- Mazoński, T., and Mokrzycki, J., construction of a tubular oven for thermostatic conduction of reactions in sealed tubes, A., 319.
- See also Cybulski, K., Jaroszewicz, W., and Mazoński, T.
- Suchorukov, K., and Epel-Bogoslovskaja, T., action of bios on processes of putrefaction, A., 788.
- Kling, E., and Kliaschko, D., formation and distribution of bios, A., 898.
- Suchy, J. F. See Poe, C. F.
- Suchý, K. See Schwaer, L.
- Suckfüll, F. See Mischeel, F.
- Sucksmith, W., gyromagnetic effect for a ferromagnetic substance above its Curie point, A., 153.
- Suden, C. T., and Malley, O. E., insusceptibility of the rat to dietary deficiency of vitamin-C, A., 1429.
- See also Wyman, L. C.
- Sudholt, See Dibbern.
- Suëda, H. See Uémura, T.
- Suë, P., conductivity and hydrolysis of sodium niobates, A., 825. Neutralisation of aqueous solutions of sodium niobate, A., 825.
- and Wétroff, G., compounds of 8-hydroxyquinoline with alkali metals and zirconium, A., 989.
- Süllmann, H., and Vischer, A., change of xanthophylls in the body after absorption from the intestine, A., 114.
- See also Frölicher, E., Laszár, L., and Verzár, F.
- Suenaga, K. See Mizushima, S.
- Suenson, E., resistance of cement pipes to acids, B., 1096.
- Süpfle, K., chronic carbon monoxide poisoning, A., 530.
- Sürü, J., oxygen compounds of fluorine, A., 1413.
- See also Erdős, J.
- Sütterlin, W. See Wiberg, E.
- Suffron, F. O., effects of combustion methods on temperature uniformity of kilns and furnaces, B., 724.
- Sugahara, S., colour reaction for fructose, A., 1484.
- Sugahara, T. See Tabata, K.
- Suganuma, I., and Kitaoka, K., presence of inert gases in certain mineral spring gases in Japan, A., 1219.
- Suganuma, K., and Goto, K. I., acetyl ester compounds [cellulose acetate], (P.), B., 624.
- Sugawara, I. S., thermodynamic properties of dichloromethane, A., 437.
- Sugawara, K., relation between temperature and p_H of bottom deposits from Takasukanuma pond, A., 60.
- Sugawara, S., thermodynamic properties of methyl bromide, A., 1461.
- Sugden, S., radioactivity of rarer elements produced by neutron bombardment, A., 559.
- See also Cavell, H. J., Groves, L. G., and Marsh, J. K.
- Sugihara, M., Young's modulus of aluminium rod composed of large crystal grains, A., 922.
- Sugiy, Y., and Shindo, H., dimethyldiphenylene oxide and its oxidation product, A., 757.
- Sugimoto, H., carbohydrate and respiratory metabolism in muscle of animals of low glycogen content. I. Fasting animals. II. Philoridzinised fasting dogs. III. Pancreatetomised animals, A., 520.
- and Miyamoto, T., effect of muscular work on metabolism in diseases of the extrapyramidal system. I. Effect on lactic acid metabolism. II. Effect on gas metabolism. III. Effect on colloid osmotic pressure of the blood, A., 886.
- See also Kodera, K.
- Sugino, K. See Kato, Yagoro.
- Sugita, M., temperature ionisation of a gas. II. General theory and relation between temperature and pressure ionisation, A., 677.
- Sugiura, K., and Chesley, L. C., effect of heavy water on viability of mouse sarcoma and rat carcinoma, A., 381.

- Sugiura, Y. See Nagaoka, Hantaro.
- Suhrmann, R., and Barth, G., reflexion of light from silver mirrors on transition from the amorphous to the crystalline state at low temperatures, A., 153.
- and Csesch, H., electric polarisation of hydrogen adsorbed on metal surfaces and its effect on the recombination of hydrogen atoms, A., 556.
- and Dempster, D., outer photo-electric effect of composite photo-cathodes at low temperatures, A., 147. Photo-electric behaviour of superposed surface layers at low temperatures, A., 808.
- and Haiduk, H., diffraction experiments with slow electrons at galena, pyrites, and stibnite, the change of the crystal surface of semi-conductors on electron bombardment, and the effect of temperature on the form of the diffraction curve, A., 1309. Inner potential of galena, pyrites, stibnite, and bismuth from diffraction curves with slow electrons, A., 1309.
- and Schallamach, A., temperature variation of the photo-effect of pure and impure metal surfaces at low temperatures, A., 12.
- Suida, H., Pöhl, H., and Nowak, A., treatment of mineral oils, (P.), B., 891. Process and solvent for separating mineral oil products, (P.), B., 1127.
- Suikovskaja, N. V. See Evstropiev, K. S.
- Suimatnikov, F. V., thermal analysis of chrysotile asbestos, A., 1347.
- Suiskov, K. I., chemical composition of petrographic ingredients present in Moscow coal, B., 388.
- See also Rakovski, E. V.
- Suit, R. F., bacterial blight of beans, B., 1012.
- Sukhanovskii, S. I. See Nogin, K. I.
- Sukhareva, N. See Kagan, B.
- Suknevitch, J., and Tschilingarjan, A., action of calcium hypochlorite on organic compounds with hydroxyl and carbonyl groups. I. Calcium hypochlorite and the higher primary alcohols, A., 958.
- Sulfo Corporation of America, and Abrams, V. R., suspension of lubricating and other particles in less dense fluid media, (P.), B., 760.
- Sullivan, B. See Near, C., and Treloar, A. E.
- Sullivan, F. W., jun., Ruthruff, R. F., and Kuentzel, W. E., pyrolysis and polymerisation of gaseous paraffins and olefins, B., 979.
- See also Standard Oil Co.
- Sullivan, J. D., residual metals in open-hearth steel, B., 634.
- See also Brown, S. L., Gardner, E. D., Pryor, E. K., and Williams, C. E.
- Sullivan, J. T., determination of starch, B., 1064.
- Sullivan, M., and Cameron, P., effect of adrenaline on alimentary lipemia of diabetes, A., 107.
- and Fershtand, J. A. B., fat absorption; its value as an index of function of the liver, A., 1015.
- Sullivan, M. X. See Hess, W. C.
- Sullivan, R. C. See Zwemer, R. L.
- Sullivan, V. R. See Smith, G. Frederick.
- Sullivan, W. H., Ingleson, H., and Adams, B. A., preparation of base-exchange materials for water softening, (P.), B., 991.
- Sullivan, W. N. See Campbell, F. L., and Jones, H. A.
- Sulman, E. H. See Ferguson Battery Co.
- Sulphide Corporation. See Westcott, E. W.
- Sulston, W. J., temperature variation of viscosity of aqueous solutions of strong electrolytes, A., 1072.
- Sulzby, A. F. See Sheets, O.
- Sumarokov, V. P., alkaline-earth compounds of guaiacol and *p*-cresol, A., 856. Separating guaiacol from wood creosote by calcium oxide, B., 1028.
- Sumi, M., fat of *Cortinellus shiitake*, P. Henn, A., 134.
- Sumida, S., perfusion of the stomach. XII. Urease (II), A., 1152.
- Sumiki, Y. See Yabuta, T.
- Summa, O., influence of heat treatment of age-hardenable rolling alloys of aluminium on resistance to corrosion by sea-water, B., 28.
- Summers, B. S., and Michigan Steel Casting Co., [ferrous] alloy, (P.), B., 413.
- Summers, R. D., Greinacher hydraulic counter for quanta and ionising particles, A., 466.
- Summers, R. E., siliceous scales [in boilers] and their prevention, B., 577.
- Summers, R. G., treatment of substances for use as foodstuffs, (P.), B., 572.
- Summerson, W. H. See Goudschmidt, A., jun.
- Sumner, F. B., and Fox, D. L., carotenoid pigments in fishes. III. Effects of ingested carotenoids on xanthophyll content of *Pandulus parvipinnis*, A., 1151.
- Sumner, J. B., enzymes, vitamins, and the zone of maximum colloidal, A., 121.
- and Howell, S. F., determination of invertase activity, A., 402. Detection of enzymes of the trypsin and papain types, A., 784.
- Howell, S. F., and Zeissig, A., concanavalin-A and haemagglutination, A., 1143.
- Sumoto, I. See Nishikawa, S.
- Sumuleanu, C., and Ghimicescu, G., micro-methods for analysis of wines, B., 779.
- Sun, C. E., addition of ammonia to ethylene, A., 849.
- See also Sherman, A.
- Sun, L. H. See Wilson, S. D.
- Sun Oil Co. See Alleman, G., and Pew, A. E., jun.
- Sunami, J. See Satô, Tomoo.
- Sunawala, S. D., and Krishnaswami, K. R., determination of potassium by the cobaltinitrite method, A., 54. Determination of chlorine in water by the *o*-tolidine method, B., 480.
- Sundararajan, K. S., new interference phenomenon observed with crystalline plates, A., 288. Measurement of thickness of thin transparent crystalline plates, A., 952.
- Sundelin, G., control of weeds in young cereals, B., 646.
- Franck, O., and Larson, C., determination of plant-assimilable nutrients in soils. I. Relation of Mitscherlich and Neubauer methods of potassium and phosphate to field-manuring trials, B., 688.
- Sunder, C., preparation of [sodium] hypsulphite, B., 451.
- Sunderland, E. See Farmer, E. H.
- Sundhoff, D., and Schumacher, H. J., dipole moments of chlorine monoxide and chlorine dioxide, A., 430.
- See also Schumacher, H. J.
- Sundstrom, C., and Solvay Process Co., hydrated calcium chloride, (P.), B., 452.
- Sunter, R. S., bleaching and dyeing of horse hair and hog bristle, B., 800.
- Superheater Co., elements for use in tubular heat-exchange apparatus, (P.), B., 833.
- See also Ostermann, R. M.
- Superior Tool & Manufacturing Co., Inc. See Corcoran, J. C.
- Superior Zinc Corporation. See French, R. W.
- Supniewski, J. I., pharmacodynamic properties of β -aminoethylapiole, A., 485.
- and Hano, J., pharmacology of *l*-ascorbic acid, A., 1020.
- Supplee, G. C., Ansbacher, S., and Bender, R. C., photochemical phenomena involved in vitamin-B₂ studies, A., 1175.
- Bender, R. C., and Flauigan, G. E., vitamin-B supplementation of milk, B., 171.
- Flanigan, G. E., and Dry Milk Co., β -lactose, (P.), B., 329.
- See also Ansbacher, S., and Hanford, Z. M.
- Supplee, W. C., effect of significant variations of calcium content of the A.O.A.C. basal rachitic ration on percentage of bone-ash in chick tibiae, A., 670.
- Suprunovitch, I. B. See Vasserman, E. S.
- Suran, L., expression of the analytical values of water, B., 704.
- Surange, V. R. See Kurien, P. N.
- Sure, B., Kik, M. C., and Buchanan, K. S., technique for study of tryptic-crept digestion of proteins, A., 404. Enzymic efficiency in avitaminosis. I. Influence of vitamin-B deficiency on tryptic and ereptic digestion of caseinogen. II. Influence of vitamin-B deficiency on efficiency of pancreatic lipase and esterase, A., 415. Enzymic efficiency in malignancy. I. Influence of growing Walker carcino-sarcoma on concentration of blood and tissue enzymes of the albino rat, A., 1008.
- Surface Combustion Corporation. See Charlesworth, S.
- Surkov, E. I. See Kuzminieh, I. N.
- Suruge, J., large permanent magnet for spectrographic study of β -rays, A., 723.
- Sushkina, N. N., changes in the soil microflora during desalinisation of carbonate solonetz, B., 164. *Azotobacter* in southern steppe soils of the U.S.S.R., B., 1106.
- Sushko, E. S., soil crusts in cotton fields, B., 420.
- See also Sushko, S. Y.
- Sushko, S. Y., behaviour of salts in soil and in subsoil water in relation to irrigation, B., 72. Takuir (takyr): genesis, chemical properties, and method of improving, B., 420.
- and Sushko, E. S., influence of exchangeable magnesium on dispersion properties of soils, B., 421.
- Susin, V. See Steinberg, S.
- Suslina, V. N. See Kirsanov, A. V.
- Suslov, B. M., running iron blast furnace for ammonia manufacture, B., 25.
- Suslov, B. N. See Riss, I. G.
- Sussenguth, O. See Elbel, E.
- Susz, B., and Briner, E., reactivity and constitution of nitric and sulphuric acids. IV. Raman spectra of mixtures of nitric acid and nitrogen pentoxide, A., 564.

- Susz, B., Perrottet, E., and Briner, E., chemical reactivity and Raman spectra of the eugenols, vanillins, and safrols, and of piperonal, estragol, and anethole, A., 1446.
- See also Briner, E., and Pfau, A. S.
- Suszko, J., and Schillak, R., pinacolin and retropinacolin rearrangements in the phenanthrene group, A., 341.
- and Szelag, F., anomalous properties of chloroformyl derivatives of quinine alkaloids, A., 366.
- See also Domanski, T., Fiedziusko, J., Gajowczyk, F., Ludwiczakowna, (Mlle.) R., and Piechulek, W.
- Suter, C. M., and Gerhart, H. L., reaction of alkyl sulphates and *p*-toluenesulphonates with the Grignard reagent and preparation of magnesium dialkyls, A., 326.
- and McKenzie, J. P., preparation and germicidal properties of 4-hydroxy-2-methylphenyl alkyl sulphides, A., 79.
- See also Moore, M. L.
- Sutherland, D. M., effects of refining action [in preparation of paper stock], B., 719.
- Sutherland, G. B. M., vibration spectra and force constants of "heavy" acetylene, A., 10.
- and Dennison, D. M., potential functions of polyatomic molecules, A., 569.
- and Penney, W. G., shape of the NO₂ molecule, A., 1056.
- Sutshkova-Netschaeva, L. P. See Galvialo, M. J.
- Sutter, H., and Wijkman, N., constitution of gluconic acids. III, A., 1224.
- Sutter, T. See Frey, K.
- Sutton, H., and Le Brocq, L. F., protection of magnesium alloys against corrosion, B., 954.
- See also Gerard, I. J.
- Sutton, J. B., and Davies, E. C. H., adsorption of methane by coal, A., 1457.
- Sutton, L. E., and Brockway, L. O., electron diffraction investigation of molecular structures of (1) chlorine monoxide, oxygen fluoride, dimethyl ether, and 1:4-dioxan, and of (2) methyl chloride, methylene chloride, and chloroform, with some applications of the results, A., 572.
- and Hampson, G. C., covalency angles of oxygen and sulphur in organic compounds, A., 1056.
- and Pauling, L., wave-mechanical treatment of the Mills-Nixon effect, A., 1057.
- See also Jenkins, H. O.
- Sutton, O. G., wind structure and evaporation in a turbulent atmosphere, B., 1.
- Sutton, P. P., and Mayer, J. E., direct determination of electron affinities; electron affinity of iodine, A., 273.
- Sutton, T. C. See Ambler, H. R.
- Suvorov, A. G., influence of the composition of the heating element on properties of Cardox cartridges, B., 751.
- Suvorovskaja, N. A. See Plaksin, I. N.
- Suwa, T., knock characteristics of gasolines and their constituents, B., 887.
- Suzuki, G., relation between salts and acidosis, A., 243.
- Suzuki, H., Keimatsu, I., and Ito, K., alkaloids of the Chinese drug "chin-shih-hu." III. Dendrobine, A., 764.
- Suzuki, Kakuo, determination of calorific value of difficultly combustible fuels, B., 884.
- Suzuki, Kakuo, solubility of sucrose and lime in their concentrated solution at 30°, A., 928.
- Suzuki, Koji, properties of densipimaric acid, a natural resin acid, A., 496.
- Apparatus for measuring m.p. of an organic substance, A., 598. Autoxidation of α -pinene and catalysts related thereto, A., 754.
- Suzuki, M., and Vohner, M., effect of an electric field on a photochemical reaction, A., 590.
- Suzuki, O., excretion of antibody through the urine, A., 231.
- Suzuki, Saburo, oxalic acid in blood, A., 641.
- Suzuki, Shigeo, and Nishina, K., digestion of foods. IV. Digestion of synthetic fats. II, A., 114.
- Suzuki, Shinichi. See Kondo, S.
- Suzuki, Takamura. See Nagai, S.
- Suzuki, Tazo. See Ueno, S.
- Suzuki, Tsuyoshi, surface activity of alkaloids, A., 396.
- Suzuki, U., Hirao, S., and Ikeda, R., nutritive value of powdered milk produced by spray-drying, B., 521. Nutritive value of powdered milk mixture as substitute for maternal milk, B., 521.
- Suzuki, V., Nakahara, W., and Inukai, F., haematopoietic action of phosphoric acid compounds of creatine and creatinine, A., 1517.
- Svanoe, H. See Du Pont de Nemours & Co., E. I.
- Svec, F., toxicity and absorption of digil-anid, A., 1411.
- Svechnikov, V. N., polymorphism of metals, A., 289.
- and Shechepak, M. I., secondary crystallisation of steel in relation to conditions of formation of Widmannstätten structures, B., 550.
- Svedberg, T., ultra-centrifuge and its region of applicability, A., 59.
- See also Heideberger, M., and Krejci, L.
- Sveinsson, S. L., magnesium and liver-glycogen, A., 399.
- Svensen, S. S., and Clay Reduction Co., precipitated silica, (P.), B., 849.
- Svensjö, N. E. See Aktieb. Separator.
- Svenska Ackumulator Aktiebolaget Jungner, active material for alkaline electric accumulators or primary cells, (P.), B., 682.
- Svensson, A., semi-acetals in perfumery, B., 700.
- Svensson, B., variation of resistance of nickel with temperature at the Curie point, A., 435.
- Svensson, B. See Stenvinkel, G.
- Svensson, T. See Euler, H. von.
- Sverdlin, A. See Godnev, I.
- Sverdlova, B. N. See Tolstopjatov, V. M.
- Sveshnikova, V. N. See Zaides, A. L.
- Svirbely, J. L., interfering action of glutathione in the silver nitrate test for ascorbic acid, A., 1036. Effect of desiccated thyroid, 2:4-dinitrophenol, and cortical hormone extract on vitamin-C content of some organs of the guinea-pig fed graded doses of ascorbic acid, A., 1421.
- Svirbely, W. J., Ablard, J. E., and Warner, J. C., molar polarisations in extremely dilute solutions; dipole moments of *d*-limonene, *d*-pinene, methyl benzoate, and ethyl benzoate, A., 694.
- and Warner, J. C., directive influence of the electric moment on substitution in the benzene ring, A., 684. Critical increment of ionic reactions; influence of dielectric constant and ionic strength, A., 1464.
- Sviridov, A. P., gold recovery by mercury on dredges, B., 500.
- Sviridovskaja, R. See Danilov, S.
- Svitalski, V. G., change in physical and chemical properties of hoppedseed due to spontaneous heating, B., 1061.
- Svoboda, F., biological value of proteins of important feeding-stuffs in respect of growth of the organism, B., 572.
- Swain, R. C. See Simon, F.
- Swainson, S. J. See Barsky, G.
- Swallen, L. C., and Commercial Solvents Corp., production of acetone from acetaldehyde, (P.), B., 716.
- Swaminathan, M. See Chakravarti, S. N.
- Swamy, S. R. See under Ramaswamy.
- Swan, D. R., and Evans, W. L., mechanism of carbohydrate oxidation. XVII. Preparation and structure of α -methyl-L-arabinomethylsido, A., 476.
- Swan, J. C., gasoline recovery apparatus, (P.), B., 296. Apparatus for liquefying gases, (P.), B., 388.
- Swan, J. H., and Gardner-Richardson Co., paper, (P.), B., 223, 1089.
- See also Thomas, C. Allen.
- Swank, R. L., and Davenport, H. A., Marchi's staining method. III. Artefacts and effects of perfusion, A., 772. Chlorate-osmic-formalin method for staining degenerating myelin, A., 1146.
- Swann, S., jun., Deditius, L. F., and Pyhrr, W. A., electrolytic reduction of ketones in glacial acetic acid. II. Reduction of aliphatic ketones to hydrocarbons, A., 1224.
- and Feldman, J., electrolytic reduction of methyl *n*-propyl ketone to *n*-pentane, A., 310.
- and Nelson, G. H., electrolytic reduction, of acetophenone, A., 176.
- Swann, W. F. G., nature of cosmic radiation, A., 8, 803. Corpuscular theory of primary cosmic radiation, A., 1442.
- and Cowie, D. B., effect of primary cosmic-ray energy on burst production, A., 1442.
- and Montgomery, C. G., cosmic ray nuclear disintegrations, A., 143.
- Swann Research, Inc. See Booth, C. F., Gittings, L. D., Jenkins, R. L., Kilbourne, K. A., Malowan, J. E., Masin, J. S., Moose, J. E., and Moss, H. V.
- Swanson, C. O., factors which affect diastatic activity in wheat, B., 650.
- Swanson, E. E., relationship between pharmacological action and chemical structure of barbituric acid derivatives, A., 525.
- Swanson, P. P., and Smith, A. H., inorganic salts in nutrition. IX. Correlation between suppressed growth and development of polycythemia induced by feeding a ration poor in salts, A., 392.
- Timson, G. H., and Frazier, E., effect of diet poor in inorganic salts on the albino rat, edestin being the source of dietary protein, A., 892.
- See also Haber, E. S.
- Swanson, T. B. See Berry, P. A.
- Swanson, W. H. See Kress, O.
- Swanson, W. W., and Job, L. V., calcium and phosphorus contents of the offspring after feeding vitamin-D to the mother rat, A., 1177.
- Swarbrick, T. See Kearns, H. G. H.
- Swartwood, K. See Universal Oil Products Co.

- Swaryczewski, *A.*, guanidino mono-, di-, and tri-chromates; crystallographic study, *A.*, 152.
- Swavely, *D. T.* See Byers, *J. M.*
- Swearingen, *L. E.*, and Florence, *R. T.*, solubility of sodium bromide in acetone, *A.*, 928.
- and Ross, *R. F.*, system pyridino-acetic acid. II.—IV., *A.*, 167, 291, 1067.
- Swedish Iron & Steel Corporation. See Kyte, *J. H.*
- Sweeney, *J. T.*, and Sweeney Bros., [flexible] paving material, (P.), *B.*, 358.
- Sweeney, *O. R.* See Bludworth, *J. E.*
- Sweeney Bros. See Sweeney, *J. T.*
- Sweet, *A. T.*, MacCarthy, *J. D.*, and Gen. Manganese Corp., extraction of manganese from [manganosiderite] ore, (P.), *B.*, 908. Separation of [ores of] metals [magnesium from iron], (P.), *B.*, 991.
- Sweet, *L. A.*, and Hamilton, *C. S.*, arsenated phenoxyalkanols, *A.*, 99. Arsenicals derived from 6-nitro- β -naphthyl-amino, *A.*, 100.
- Sweetman, *L.* See List, *G. M.*
- Sweets Laboratories, Inc. See Meigs, *J. V.*
- Sweetser, *S. B.* See Schumb, *W. C.*
- Sweitzer, *C. W.*, carbon black, *B.*, 483.
- Columbian Carbon Co., and Binney & Smith Co., [black nitrocellulose, etc.,] lacquer, (P.), *B.*, 1103.
- Sweitzer, *P.* See Culbertson, *J. B.*
- Swenden, *J.* See Gillis, *J.*
- Swenson, *J. A.*, Wagner, *L. A.*, and Pigman, *G. L.*, effect of granulometric composition of cement on properties of pastes, mortars, and concretes, *B.*, 769.
- Swenson, *T. L.*, and James, *L. H.*, comparison between eggs frozen at 0° and at -78.5°, *B.*, 1162.
- See also Balls, *A. K.*
- Swezey, *F. H.* See Bohannon, *V. L.*
- Swezy, *O.*, hormones of the pituitary of the infantile rat, *A.*, 543.
- Świątkowska, *W.* See Krause, *Alfons.*
- Swientoslawski, *W.*, determination of degree of purity of liquid substances and azeotropic mixtures, *A.*, 321. Distillation apparatus, *A.*, 321. Ebulliometric determination of degree of decomposition of an organic substance, *A.*, 876. Distillation of azeotropic mixtures, *A.*, 927. Physico-chemical analysis of process of coking, *B.*, 130.
- and Brzustowska, *H.*, total quantity of vapours and gases evolved during thermal decomposition of coal, and of its petrographic varieties, *B.*, 131.
- Brzustowska, *H.*, and Krakowski, *M.*, application of V. Meyer's method to determination of moisture content, *A.*, 316.
- and Choraży, *M.*, production of semi-coke and coke from non-caking coal. I., *B.*, 130. Permeability of metallurgical coke as a characteristic property, *B.*, 131.
- and Miernik, *S.*, determination of small quantities of water in solid organic substances, *A.*, 1140.
- and Rosiński, *S.*, heat of setting of cement, *B.*, 150.
- and Salcewicz, *J.*, esterification constant in the gas phase coexisting with the liquid phase, *A.*, 33. Application of Newton's law of cooling to the measurement of weak thermal effects, *A.*, 57.
- Swientoslawski, *W.*, Wojciechowski, *M.*, and Miernik, *S.*, ebulliometric measurements of moisture content in standard benzoic acid, *A.*, 1140.
- and Zlotowski, *I.*, measurement of heat liberated by absorption of γ -radiation, *A.*, 598.
- Zmaczyński, *A.*, Zlotowski, *I.*, Usakiewicz, *J.*, and Salcewicz, *J.*, anomalous heat effects of minerals and compounds. II. Ice calorimeter measurements, *A.*, 448. Specific heat of minerals and salts of the rare-earth elements, *A.*, 690.
- Swietochowski, *B.*, influence of the planting period on yield and seed value of potatoes, *B.*, 166. Formation of nitrates on virgin and cultivated low-moor soil, *B.*, 514.
- See also Bac, *S.*
- Swift, *C. E.*, and Union Oil Co. of California, dewaxing of oils, (P.), *B.*, 1035.
- See also Bray, *U. B.*
- Swift, *R. W.* See Braman, *W. W.*
- Swift, *T. B.*, and Mountain Copper Co., production of cuprous oxide [for paint pigments], (P.), *B.*, 914.
- See also Thomas, *S. B.*
- Swift, *W. C.*, and Amer. Brass Co., welding of copper, (P.), *B.*, 1051.
- Swift & Co. See Christopher, *E. F.*, and Paddock, *L. S.*
- Swift & Co. Fertilizer Works. See Siems, *H. B.*
- Swift, Levick & Sons, Ltd., Horsburgh, *G. D. L.*, and Tetley, *F. W.*, alloys for permanent magnets, (P.), *B.*, 999.
- Swindell-Dressler Corporation. See Brooke, *F. W.*, and Dressler, *P. d'H.*
- Swindells, *E.*, analysis of sulphonated aliphatic alcohols and similar condensation products, *B.*, 839.
- Swinden, *T.*, and Stevenson, *W. W.*, heterogeneity of steel ingots. VI. Determination of nitrogen. VIII. Gases in iron and steel and their effect on solidification of ingots, *B.*, 994.
- Swingle, *M. C.*, difference in action of derris and pyrethrum against imported cabbage worm shown by experiments with gelatin films containing these materials, *B.*, 327.
- and Cooper, *J. F.*, toxicity of fixed nicotine preparations to certain lepidopterous pests of truck crops, *B.*, 778.
- Swingle, *W. W.*, and Parkins, *W. M.*, effect of trauma on healthy vigorous dogs with or without adrenal glands, *A.*, 1422.
- Pfiffner, *J. J.*, Vars, *H. M.*, and Parkins, *W. M.*, relation between blood-pressure, blood-urica-nitrogen, and fluid balance in adrenalectomised dog, *A.*, 127.
- Swings, *P.*, behaviour of SiF bands in stellar spectra, *A.*, 1051.
- Swinne, *R.* See Westinghouse Electric & Manufg. Co.
- Swire, *H. G.* See Carpet Trades, Ltd.
- Swisher, *C. A.*, and Poe, *C. F.*, chemical changes accompanying fermentation of cherry juice, *B.*, 1017.
- See also Poe, *C. F.*
- Swisher, *R. D.* See Halford, *J. O.*
- Swyer, *R.*, diphtheria formol toxoid and Moloney test, *A.*, 1168.
- Sykes, *C.*, thermal changes occurring during transformations in a solid solution, *A.*, 576.
- Sykes, *C.*, and Evans, *H.*, transformations in iron-aluminium alloys, *A.*, 693.
- Sykes, *J. F.*, Taylor, *N. B.*, and Weld, *C. B.*, effect of irradiated ergosterol and parathormone on blood-phosphorus, *A.*, 539.
- Sykes, *R. F. R.* See Howarth, *J. T.*
- Sylla, *A.*, specific dynamic action of food-stuffs in endogenous forms of obesity and its influencing by the thyrotropic hormone, *A.*, 887.
- Syllaba, *G.* See Ficssinger, *N.*
- Sylvania Industrial Corporation, coating compositions, (P.), *B.*, 320. Moisture-proofing and moisture-proofed [cellulosic sheet] materials, (P.), *B.*, 353. Flexible coating compositions, (P.), *B.*, 736.
- Sylvester, *N. D.*, and Lampitt, *L. H.*, determination of copper in foods, with special reference to milk, *B.*, 746.
- See also Lampitt, *L. H.*
- Sym, *E. A.*, enzymic esterification, *A.*, 403. Acid-base catalysis and action of esterase, *A.*, 403.
- Symons, *P. S.*, lacquer formulation, *B.*, 319. Varnishes and their selection, *B.*, 1102.
- Syndicate "Jozijdhoff," sterilisation of liquids [by heat], (P.), *B.*, 978.
- Syngala, Fabrik für Chemisch-Synthetische & Galenische Arzneimittel G.m.b.H., preparation of double compounds of di- and tri-methylxanthines with salts of camphoric acid [pharmaceuticals], (P.), *B.*, 287. Therapeutically active [chlorophyll] preparations, (P.), *B.*, 1166.
- Synthetic Plastics Co., Inc. See Pollak, *F.*
- Synthetical Laboratories. See Chevons, *N. D.*
- Syrkin, *J.*, and Vassiliev, *V.*, reaction velocity and quantity of catalyst, *A.*, 830.
- See also Vassiliev, *V.*, and Wolkenstein, *M.*
- Syromyatnikov, *F. V.*, transfer of silica by water vapour, *A.*, 468. Micropyknometric method for determination of sp. gr. of minerals, *A.*, 952.
- Szabo, *B. von H.*, relation between quantity and fat content of milk, *A.*, 884.
- Szabó, *Z.*, ionic activities of hydrochloric acid, *A.*, 1323. Variation of diffusion potential with concentration. I., *A.*, 1325.
- See also Naray-Szabó, *S. von.*
- Szafrańska, (*Mle.*) *Z.*, viscosity of mixtures of hexane and nitrobenzene in the neighbourhood of the critical point of solution, *A.*, 927.
- Száhlender, *K.*, umbelliferone content of Persian ammoniacum gum, *B.*, 573.
- Szakáll, *A.*, phosphate metabolism in muscular work, *A.*, 1150.
- Szalkowski, *C. R.* See Beal, *G. D.*
- Szankowski, *W.* See Pilat, *S. von.*
- Szarka, *S.*, gonadotropic hormones from various organs, *A.*, 1032.
- Szczypiński, *W.* See Miłobędski, *T.*
- Sze, *C. H.* See Chi, *Y. F.*, and Tseng, *C. L.*
- Sze, *F.* See Chi, *Y. F.*
- Szegly, *L. A.*, action of cooking salt, potassium bromate, and ammonium persulphate as baking accessories, *B.*, 42.
- Szego, *P.* See Kenner, *J.*, and Newitt, *D. M.*
- Szegő, *L.*, detergent power of sulphonated soaps. II., *B.*, 159.
- and Cassoni, *B.*, colorimetric determination of traces of fluorine, *A.*, 595.
- See also Cambi, *L.*

- Szegvari, A., and Amer. Anode, Inc., [maintaining homogeneity of] aqueous dispersions, (P.), B., 84.
- Szejnman, M. See Zweibaum, J.
- Szelag, F. See Suszko, J.
- Szendi, B., quantity, distribution, and significance of placental glycogen in different phases of pregnancy; function of human and haemochorial placenta, A., 1004.
- Szendrő, P., Schleicher, E., and Kluge, L., effect of X-ray irradiation on colloidal state and amino-acid content of rat sarcoma, A., 649.
- Szent-Györgyi, A., mechanism of respiration, A., 519, 1013. Significance of fumaric acid in respiration of animal tissues. I. Introduction, summary, and methods, A., 1406.
- Szepeshelyi, A., variation in sugar content of blood and urine after administration of glucose, A., 110.
- Szeps, B., hardening of plaster or other porous ware, (P.), B., 456.
- Szszich, L. von, gum in fuels for spark-ignition engines, B., 54. Destructive hydrogenation of carbonaceous materials, (P.), B., 9, 134.
- Szigeti, L., photographic reproduction, (P.), B., 751.
- Szikla, G., and Rozinek, A., gasification of fuel dust, (P.), B., 260.
- Szilárd, C. See Rosenthal, E.
- Szilard, L., and Chalmers, T. A., radioactivity induced by neutrons, A., 276. See also Brachs, A., and Collie, C. H.
- Szimkin, J. See Better, E. J.
- Sziyessy, G. See Münster, C.
- Szlatinay, L. See Náráy-Szabó, S. von.
- Szmyt, M. See Hrynakowski, K.
- Szmytówna, See under Szmyt.
- Sznajder, L., little-known reactions in qualitative inorganic analysis, A., 596.
- Szniolis, A. See Just, J.
- Szörényi, E. See Lasnitzki, A.
- Szongott, H. See Tomesik, J.
- Szper, J., action of sodium tetrathionate on development of typhoid and paratyphoid bacilli, A., 786. Isolation of typhoid and paratyphoid bacilli from water, A., 786.
- [with Jasinska, M., Przybyszewska, K., Brodzka, T., and Wizenfeld, L.], velocity of solution of sodium in solutions of alcohols in benzene, toluene, and xylene, A., 308.
- and Gajewski, Z., conductivity of glycerol solutions of calcium, strontium, and barium chlorides, A., 304.
- and Uzdanska, S., velocity of coagulation of colloids, A., 297.
- See also Centnerszwer, M.
- Szperl, L., and Herszafi, J., esters of thionaphthoic acid, A., 342.
- Szpidbaum, H., blood-cholesterol in typhoid fever, A., 1011. Effect of gonadotropic hormone on blood-cholesterol and evolution of typhoid fever, A., 1011.
- Sztrókey, K., crystallographic relations of aluminium iodate nitrate, A., 1060.
- Szule, N., structure of the electric arc, A., 1046.
- Szymanowski, W., influence of potassium iodide concentration on the time of decay of the uranine fluorescent radiation, A., 915. Duration of luminosity and decay law for fluorescence radiation, A., 1190. Molecular rotation and measurements of decay time of fluorescence, A., 1190.
- Szymanowski, W., variation of fluorescence decay time with concentration of dye and viscosity of solvent, A., 1190. Decay time of fluorescence measured with an improved fluorometer, A., 1190.
- See also Jabłoński, A.
- Szymkiewicz, D., effect of wind on concentration of carbon dioxide in the air, A., 724.
- Szymson, S. See Seyewetz, A.
- Szyska, G. See Slotta, K. H.
- T.
- T.R.C. Corporation. See Sommer, A.
- Ta, Y. See Heng, Y. K.
- Tabakov, Z., and Belovodski, V., magnesite brick and new kinds of brick from carbonate raw materials, B., 546.
- Tabata, K., Moriya, T., and Sugahara, T., devitrification of glass. XIV. Growth of crystals of $R_2O-B_2O_3-SiO_2$. XV. Effect of replacement of Na_2O by K_2O on rate of crystal growth; X-ray analysis of the crystals, B., 900.
- Taber, G. H., jun. See Isom, E. W.
- Tabern, D. L., and Volwiler, E. H., sulphur-containing barbiturate hypnotics, A., 1507.
- See also Moore, E. E., and Volwiler, E. H.
- Tabije, D. P. See Adriano, F. T.
- Tabony, M. F., and Audidier, H., volumetric determination of arsenates, A., 184.
- and Echard, R., influence of nature of impurities on formation of Liesegang rings in gelatin (silver chromate), A., 164.
- and Jauneau, G., rhythmic reactions in silicic acid gels, A., 933.
- Tobozzi, G., filter, (P.), B., 882.
- Tabunov, K. A. See Paschevski, D.
- Tabuta, T. See Barger, G.
- Tabuteau, J., oxidation of carvomenthene by selenium dioxide; synthesis of carvotanacetol, A., 624.
- Tachi, I., electrolytic reduction potential of organic compounds. XXII. Mechanism of electrolytic reduction, A., 1463.
- See also Shikata, M.
- Tachibana, S. See Kosuzi, T.
- Tacke, B., manuring of newly cultivated soils. III. Germany, B., 515.
- Taconis, K. W. See Keesom, W. H.
- Taczanowska, J. See Lampe, W.
- Tada, Y. See Takei, S.
- Tadokoro, T., sex differences from viewpoint of biochemistry. III., A., 377. Differences between chemical properties of common and glutinous rice starch. III., B., 284.
- and Saito, T., chemical properties of mucilage of alga, used as cementing material of Japanese walls, B., 852.
- and Yoshimura, K., chemical properties of proteins of *Iridaea laminarioides*, A., 268. Polysaccharides of *Iridaea laminarioides*, A., 268.
- Tadros, W. See Daoud, K. M.
- Taeger, H. See Behrens, B., and Seelkopf, K.
- Täufel, K., discovery, isolation, and synthesis of vitamin-C, A., 1175. Putrefaction and biological degradation of fats, B., 1101.
- Täufel, K., De Mingo, M., and Thaler, H., determination of the acetyl value of fats. II. Acetylation process, B., 1002.
- and Künkele, F., preparation of oleyl chloride and α -mono-olein, A., 473.
- and Seusz, A., autoxidative spoilage of fats. VII. Behaviour of oleic acid and its esters [and linoleic acid], B., 364.
- and Thaler, H., structure of cell-wall of coffee[bean], A., 1039.
- and Thaler, H., [with Bäurle, A.], cellulose of foodstuffs and fodder. I. Crude fibre and cellulose, B., 428.
- Thaler, H., and Bauer, O., mechanism of salicylaldehyde reaction for detection of fusel oils and ketones, B., 839.
- Thaler, H., and Martinez, M., ketone formation in fats. III. Behaviour of fat acids at elevated temperatures, B., 416.
- Thaler, H., and Starke, K., determination of nitrogen and phosphorus in Kjeldahl's decomposition using selenium, A., 595.
- See also Diemair, W.
- Tafel, V. See Fischer, Joachim.
- Taft, R. See Stareck, J. E.
- Tagaya, M. See Endő, Hikozō.
- Tagaeva, N., volumetric determination of small amounts of boron in natural solutions, A., 1093. Origin of petroleum water, A., 1219.
- Taglioni, V. See Dogliotti, G. C.
- Taguchi, E. See Shikata, M.
- Tainter, M. L., Bergstrom, F. W., and Cutting, W. C., metabolic activity of compounds related to dinitrophenol, A., 526.
- Cutting, W. C., Wood, D. A., and Proeschler, F., dinitrophenol; blood, urine, and tissues of dogs on continued medication and after acute fatal poisoning, A., 1020.
- See also Cutting, W. C., and Terada, B.,
- Tainton, U. C., metallic [zinc-powder] paint, (P.), B., 642.
- and Harris, F. W., metallic [zinc] foil, (P.), B., 730.
- Tait, W. H. See Campbell, (Sir) John.
- Taitz, A. J. See Vasiliev, Z. V.
- Taji, Y., nickel alloys in aircraft engineering. I. Alloy steels for aircraft structure. II. Materials for construction of aircraft engines, B., 272.
- Tajima, K., alimentary hyperlipemia, A., 653.
- See also Kuriyagawa, T.
- Takabe, T., action of cardiotonics on frog hearts, A., 1158.
- Takács, F. See Jendrassik, L.
- Takada, H. See Kita, G.
- Takahashi, E., Iguchi, K., Mitamura, K., and Shirahama, K., influence of soybean cake on milk production and quality of butter, A., 884.
- Tase, S., and Saeki, Y., food-chemical studies of oats. V., B., 1065.
- Takahashi, Ichimatsu, comparative chemistry of muscle, A., 1521. Embryochemistry of amphibia. VII. Enzymes in eggs of giant salamander, A., 1535.
- and Kumon, T., creatine formation in the organism, A., 1530.
- Takahashi, Ichiro. See Aoyama, S.
- Takahashi, K., and Shinkai, S., determination of ferrous iron in glass (continued), B., 850.
- See also Shinkai, S.

- Takahashi, S. See Araki, T.
- Takahashi, Sadao, and Makishima, G., preparation of ethylene glycol, B., 1035.
- Takahashi, Y., preparing gluconic acid, (P.), B., 121. Esters of phenylethyl alcohol with organic acids. I. Action as antiseptics. II. Toxicity, B., 572.
- and Asai, T., fermentation product of galactose by acetic acid bacteria; production of galactonic and comenic acids, A., 125.
- and Yokoyama, H., nutrition with edible tubers. I. Effects of common edible tubers and polished rice on breeding, A., 114.
- Takahisa, T., modifications in distribution of phosphorus in rabbit livers by changes in blood-sugar and liver-glycogen, A., 1172.
- Takai, T. See Ishikawa, F.
- Takamatsu, A., detoxicating hormone of the liver [yakriton]. XLIX. Effect of yakriton on a negative Arakawa reaction. L. Effect in counteracting cardiac dilation. LI. Effect on the chloride content of blood, A., 538.
- Takamatsu, M., organic constituents of elephant's urine, A., 1147. Comparison of human with animal urine, A., 1147.
- Takamatsu, Y., and Horie, T., action of copper-amine solution on cellulose. I. and II., B., 16.
- Takamiya, E., castor-bean lipase. VI. and VIII., A., 1025, 1416.
- Takané, K. See Kōzu, S.
- Takano, M., partial hydrogenation of fish oil. III. Hydrogenation of unsaturated fatty acids of the oleic series of sardine oil, B., 912.
- and Kumeno, Y., partial hydrogenation of fish oil. II. General course of hydrogenation of sardine oil, B., 859.
- Takata, Kunihisa. See Atsuki, K.
- Takata, Kunisuke, seasonal changes of reducing and non-reducing sugars in the upper and under parts of citrus fruits, A., 1432.
- Takayama, Y., and Oeda, H., amino-acids and related compounds. VIII. Electrolytic oxidation of histamine and histidine, A., 92.
- Takebe, T. See Sahashi, Y.
- Takeda, K., chemistry of sclerotia of *Pachyma hoelen*, Rumph. IV. Comparison of β -pachyman with other related carbohydrates. V. Nutrient value of pachyman, A., 406.
- Takeda, Y., *Saccharomyces pēka*, nov. sp., A., 1418.
- Takehara, S. See Ueno, Sei-ichi.
- Takei, B., net density of starch, B., 1112.
- Takei, M. See Miyata, A.
- Takei, S., Imaki, T., and Tada, Y., natural and synthetic $\Delta^8(7)$ -hexenol, A., 844.
- Sakato, Y., and Ono, M., odorous principles of green tea. III. Acids of raw tea oil. IV. Odorous substance of dark tea, A., 267, 796.
- Takei, T. See Mitsubishi Denki Kabushiki Kaisha.
- Takei, Takeshi, and Kawai, N., salt-cake process for roasting zinc ore, B., 551.
- Takei, Toshio, and Tomiyama, S., composition of Tamari soy oil, B., 318.
- Takemura, W. See Hachihama, Y.
- Takeuchi, K. See Sahashi, Y.
- Takeuchi, O. See Fujise, S.
- Takeuchi, T., mass of the neutrino, A., 143.
- Takizawa, S. See Makino, S.
- Takō, H., properties of thin layer of clay-water solution interposed between solid surfaces, A., 1458.
- Talaat, M. See Barcroft, J.
- Talalay, J. A., crazy-pattern (marbled) rubber goods, (P.), B., 916.
- Talbert, G. W. See Nat. Aniline & Chem. Co.
- Talbot, J., rendering india-rubber and similar material fireproof, (P.), B., 962.
- Talbott, J. H. See Dill, D. B., and Rein, H.
- Talen, H. W., influence of pigments in paints and lacquers, in comparison with that in rubber, B., 510. Modern lacquers [and paints], B., 1151.
- Talenti, M., glutathione in hens' eggs, A., 1265.
- Taliaferro, N. L., some properties of opal, A., 1479.
- Talibi, G. A., importance of micro-elements and the Ca/Mg ratio for plant growth in relation to the liming of acid soils, B., 867.
- Talley, P. J., carbohydrate-nitrogen ratios with respect to sexual expression of hemp, A., 265.
- Tallman, R. C. See Riebsomer, J. L.
- Talmud, B. A., and Talmud, D. L., gelatinisation and polymerisation; case of thixotropy, A., 1075.
- Talmud, D. L., linear phenomena. III. Linear adsorption and gelatinisation of lyophilic systems, A., 698.
- See also Bresler, S. E., and Talmud, B. A.
- Tam, R. K., and Magistad, O. C., relationship between nitrogen fertilisation and chlorophyll content in pineapple plants, A., 905.
- Tamaki, Masaichi, heat treatment and applications of nickel-chromium steels, B., 807.
- Tamaki, Masakatsu, Matsui, T., and Kobayashi, Tatsuo, pharmacological action of insulin, A., 1411.
- See also Nuki, B.
- Tamamushi, B., two-dimensional equation of state and structure of surface layers. II. Surface layer of pure liquids, A., 157. Meaning of the exponential equation between surface pressure and concentration, A., 819.
- and Umezawa, H., dehydrogenation of succinic acid by charcoal; model of the mode of reaction of succinodehydrase, A., 940. Adsorption and oxidation of succinic acid on carbon, A., 1467.
- Tamarkina, M. L. See Permjakov, V. M.
- Tamaru, K., age-hardening of brass, B., 500. Two-stage transformation in iron and steel, B., 728.
- Tamaru, S., and Imai, Y., active charcoal. XIII. Velocity of sorption of vapour in a dilute current of inert gas, A., 1457.
- and Kamada, M., fuel cell working at moderately high temperatures. II., A., 1326. Fuel cells of working temperature below 600°, B., 316.
- and Ochiai, K., fuel cell working at moderately high temperatures. I., A., 1326.
- and Siomi, K., redetermination of thermal dissociation equilibria of inorganic compounds. IV. Determination of dissociation equilibria of strontium and barium hydroxides with high-temperature vacuum balance. V. Determination of dissociation equilibria of hydrates of strontium and barium hydroxides with high-temperature vacuum balance, A., 168.
- Tambe, G. C., and Wad, Y. D., silage-making in mud-walled towers, B., 521.
- Tamele, M. W. See Bataafsche Petroleum Maats.
- Tamhane, V. A., summary of investigations at agricultural research station, Sakrand, B., 244.
- Tamiya, H., peroxidase in algae, A., 532.
- Tamm, G. See Bernal, J. D.
- Tamm, I., interaction of neutrons and protons, A., 142.
- Tamm, O., rapid mineralogical examination of soil, B., 243. Oxalate method in chemical examination of soils, B., 244.
- Tammann, G., transformations in homogeneous substances, A., 16. Structure of thin metallic layers produced by cathodic sputtering or vaporisation, A., 287. Alteration of adsorption of dyes on nickel wires on transition of the wire from the hard to the soft state, A., 929. Effect of heating a nickel catalyst on its ability to accelerate the transformation of para-hydrogen, and dependence of pyrophoric property of nickel on temperature of heating, A., 1329.
- and Bandel, G., m.-p. and transition curves of the forms of ice from heavy water, A., 302.
- and Boehme, W., number of water drops condensing on various solids, A., 284. Effect of cold-working on thermal conductivity, A., 692. Grain changes in polymorphic transformation, A., 1194.
- and Büchner, A., linear crystallisation velocity of ice from ordinary and heavy water, A., 439. Supercooling capacity of water and linear velocity of crystallisation of ice in aqueous solutions, A., 829.
- and Dreyer, K. L., corrosion of steels containing copper, B., 231.
- and Laass, F., orientation of the crystallites in cast nickel and changes produced by rolling and recrystallisation, A., 919.
- and Moritz, G., preparation of thin wires by cooling streams of liquid metal, B., 771.
- and Müller, W., transition of antimony into the vitreous amorphous state, A., 151. Increase in deformability and decrease in cleavability [of metals] with rise in temperature, A., 1311. Transition from brittleness to plasticity with rising temperature of crystals, A., 1311.
- and Rührenbeck, A., wetting power of metals of low m.p. for metals of high m.p., A., 930. "Decaying" [inter]-metallic compounds, A., 1089.
- Tammasi, G., intensive manuring of fodder crops, B., 1110.
- Tampy, K. K. See Mukhopadhyay, B. K.
- Tamura, K., Kihara, G., Asahina, Y., and Ishidate, M., *p*- (or 2:5-)diketocamphanecarboxylic acid and related acids, (P.), B., 46.
- Kihara, G., and Ishidate, M., cardio-stimulant effect of Japan camphor: a transformation product in the body, *d-trans-7-aldehydoapocamphor*, as the true active substance, A., 865.
- Tanabe, R. See Kameyama, N.
- Tanabe, S. See Uchida, S.

- Tanaka, G., effect of epithelial cell and colloidal substance of thyroid gland on excretion of iodine in urine, A., 258. Effects of extracts of thyroid gland obtained by treatment with acid alcohol on iodine excretion in urine, A., 258.
- Tanaka, H. See Yoshida, U.
- Tanaka, K. See Kita, G.
- Tanaka, Kenzo, X-ray examination of selenium crystals, A., 920.
- Tanaka, Kiyoshi, physiology of acetic bacteria. II. Oxidation of organic acids in presence of acetic bacteria, A., 1029.
- Tanaka, Kunikichi. See Sakurada, I.
- Tanaka, Shinsuke, and Okuno, G., K-series X-ray emission lines of iron in several compounds. II, A., 556. K-series X-ray emission lines of manganese in several compounds, A., 1184.
- Tanaka, Shosaburo, alkali zincate storage battery with the cathode filled with zinc powder. I., B., 507.
- and Yoshimoto, K., alkaline storage battery. VII. Alkali zincate storage battery with mercury cathode. VIII. and IX. Alkali zincate storage battery with nickel-mesh cathode, B., 681.
- Tanaka, Shosuke, bagasse for manufacture of Celotex (Artex). I. Changes in constituents of a pile of the bagasse, B., 666.
- Tanaka, Tomochiro, [odourless] sulphur soap, (P.), B., 238.
- Tanaka, Toramaru. See Fujiwara, Takao.
- Tanaka, Tulomu, and Koana, J., band system of neutral OH. III. Identification of the (2'2''), (3'0''), (3'3''), (4'1''), (4'2''), (4'3''), and (4'4'') bands; formulation of the wave-numbers of the null lines, A., 679.
- Tanaka, Y. See Hirata, H.
- Tanaka, Yoshio, Kambara, S., and Noto, J., oil-resistance of rubber. I. Swelling of vulcanised rubber, B., 915.
- and Kobayashi, R., high-pressure hydrogenation of aromatic compounds. II. Production of active catalyst by reduction of nickel oxide in a benzene medium. III. Mechanism of high-pressure hydrogenation of benzene with nickel oxide. IV. Inhibitory action of saturated chain compounds on high-pressure hydrogenation of benzene. V. Inhibitory action of inert gases of high-pressure hydrogenation of benzene, B., 261, 296.
- Kobayashi, R., and Furihata, M., sludge formation during autoxidation of hydrocarbon oils, B., 1032.
- Kobayashi, R., and Tsukuda, T., non-freezing lubricants. I. Production by adding hardened fatty oils, etc. II. Production by adding saturated fatty acids, B., 981, 1125.
- Kuwata, T., and Aoki, M., antioxidant of unsaturated hydrocarbons. I. Effect of phenols and naphthols on autoxidation of tetralin, B., 12.
- Tananaev, I., preparation of pure sodium fluoride, A., 179.
- and Savtschenko, G. S., analysis of technical sodium fluoride, B., 268.
- Tananaev, N. A., detection of calcium, strontium, and barium in their mixtures, A., 719. Theory of L_p [solubility product], A., 929. Influence of hydrolysis on solubility, A., 929. New complex compound, A., 946. Detection of barium, strontium, and calcium present together, A., 949.
- Tananaev, N. A., fractional detection of mercury, A., 950. Volumetric determination of lead in alloys containing tin, antimony, and copper, B., 272, 501. Argentometric determination of sodium sulphide and hydrosulphide present together, B., 723. Argentometric determination of sodium hydroxide and sulphide in sodium aluminate, B., 723.
- and Antoschtschenko, I. I., zincate method of determining sulphur in slags, B., 723.
- and Chalat, K. D., argentometric determination of barium oxide and barium sulphide in barium aluminate, B., 451, 947.
- and Frolov, I. D., determination of magnesium as magnesium oxide in presence of ammonium salts, B., 21.
- and Junitzkaja, N. V., fractional detection of mercury, A., 950.
- and Kiladze, D. N., rapid determination of small quantities of sulphates, B., 402.
- and Kremer, J. N., argentometric determination of sodium sulphide and sodium hydrosulphide in mixtures, A., 596.
- and Ponomarev, V. D., detection of arsenic in presence of antimony, A., 836. Volumetric determination of [corrosive] sublimate with lead sulphide, B., 628.
- and Schachova, M. A., argentometric determination of sodium hydroxide and sodium sulphide in sodium aluminate, B., 451.
- and Schapovalenko, A. M., drop method of detection of anions, A., 316.
- and Schulepova, V. A., drop methods for identification of cations in presence of phosphate ion, A., 837.
- Tanasescu, E. See Tanasescu, I.
- Tanasescu, I., and Simonescu, T., hydroxytriphenylmethanes; condensation of aromatic aldehydes and phenols with phosphoric acid, A., 208.
- and Tanasescu, E., indazoles; 2-p-dimethylanilino-3-carbethoxyindazole, A., 991.
- Tandon, R. K. See Singh, B. N.
- Tandon, S. P., effect of temperature on bacterial ammonification of urea, A., 1167.
- See also Dhar, N. R.
- Tanemura, K., composition of hemicellulose in the waste soda of viscose factories, and its fermentation, B., 586. Composition of viscose spinning bath, B., 586.
- and Miyoshi, S., reaction between sodium sulphate and oxalic acid, A., 961. Caustic soda from sodium sulphate; application to recovery of the viscose spinning bath, B., 766.
- Tang, P. S., and Whang, P. C., iodine content of Chinese marine algae, A., 1436.
- See also French, C. S.
- Tang, T. H., and Chao, E. H., Wei-ling-sien. I., B., 1164.
- and Hsu, C. W., composition of purple-flowered I-mao-tsao [*Leonurus sibiricus*, L.], A., 1549.
- and Tseng, T. Y., composition of P'an-shia. I., B., 1164.
- Tang, T. Y., and Wang, H. L., [Chinese] reed and its pulp, B., 264.
- Tang, Y. C., and Wang, H. L., application of modified single-stage process as general method of determining cellulose, B., 844, 1038.
- Tanganyika, Department of Veterinary Science, variations in serum-protein fractions during an attack of rinderpest, A., 888.
- Tange, U., nutritive value of butter and margarine, A., 653. Relationship between absorption and nutritive value of fats, A., 653.
- Tangerding, W., grain growth in carbonyl iron and preparation of single crystals of iron, A., 1307.
- Taniguchi, M., and Sakurada, I., solubility of cellobiose octa-acetate in binary organic liquids, A., 26. Diffusion of compounds of high mol. wt. and related compounds. I. Glucose penta-acetate, cellobiose acetate, and quinol in organic fluids. II. Calculation of molecular size. III. Measurements in cellulose nitrate solution, A., 1072.
- Lee, S., and Sakurada, I., thixotropy of solutions of cellulose derivatives. I. Chloroform solutions of cellulose triacetates of different degrees of degradation after addition of non-solvents, A., 445.
- Taniguti. See under Taniguchi.
- Tanislau, I. See Ostrogovich, A.
- Tankard, A. R., Bagnall, D. J. T., and Morris, F., composition of amniotic fluid, A., 234.
- Tankó, B., and Robison, R., hydrolysis of hexose diphosphoric ester by bono-phosphatase. II. (a) Participation of phosphohexokinase; (b) Isolation of fructose 1-phosphate, A., 660.
- Tanne, C. See Patscheke, G.
- Tanner, C. C. See Baxter, J. P.
- Tanner, F. W., public health significance of sewage sludge when used as a fertilizer, B., 1071.
- and Evans, F. L., effect of meat-curing solutions on anaerobic bacteria. III. Sodium nitrite, B., 331.
- See also Evans, F. L., and Wallace, G. I.
- Tanner, H. G., influence of lead tetracthyl on combination of hydrogen and oxygen, A., 42. Explosive, (P.), B., 383.
- Tanner, R. R., Lodeesen, H. J., and Metal Finishing Res. Corp., coating and cleaning metal [zinc, magnesium, or iron], (P.), B., 315.
- Tanning Process Co., Connor, J. H., and Merritt, M. M., treatment of hides, skins, or leather, (P.), B., 865*.
- See also Connor, J. H., and Merritt, M. M.
- Tanret, G., isolation of stachyose from the pea (*Pisum sativum*), A., 1550.
- Tanteri, B. See Biazzo, R.
- Tao, L. V., and Mo, W. S., equilibria between the aquopentammino-cobaltic sulphates and their sulphuric acid solutions at 45°, A., 824.
- Tao, W. S., and Chu, C. M., essential oil in the ripe Fu Chü [tangerine] fruit, A., 267.
- Yao, S. Y., and Liu, C. T., chemical composition of ripe Huang Yen Chü [*Citrus* species], A., 268.
- Tapadinhas, J. See Jacobsohn, K. P.
- Taplin, T. J., froth-flotation concentration processes, (P.), B., 1147.
- Tapp, T. C. See Heath, A. R. N.
- Tapsell, H. J., and Johnson, A. E., nature of creep under stresses produced by pure flexure, B., 954.

- Taquini, A. C. See Arrillaga, F. C.
- Taran, E. N., alkalimetric determination of glucose, A., 1108.
- Taranenko, V., porcelain sheaths for thermocouples, B., 209.
- Taranola, C., determination of aldehydes in wine with the Pulfrich photometer and with the photo-electric colorimeter, B., 330.
- Tarasenko, N. P. See Borodina, O. Y.
- Tarasenkova, E. M. See Orlov, N. A.
- Tarasov, B. K., and Govakov, V. P., cracked and hydrogenated gasolines, B., 1030. Influence of dissolved gum on engine performance, B., 1031.
- and Rudenko, V. V., determination of gum dissolved in kerosene, B., 1032.
- and Seledshiev, G. N., hydrogenation of Kashpira tar, B., 790.
- Tarasov, G. J., polymerisation of liquid hydrocarbons under the action of electric discharges, B., 293. Material and energy balance of the [calcium] carbide process, B., 305. Use of semi-coke in manufacture of calcium carbide, B., 354.
- See also Iljinski, V. P.
- Tarasov, P., Alexandrov, L. A., and Popova, N. V., cracking of distillates from coking stills, B., 131.
- Tarasov, T. J., and Chmelovskaja, N. A., preparation of aluminium oxide from urtite by the sulphurous acid method, B., 20.
- Tarbox, J. P. See Budd Manufg. Co., E. G.
- Tarbox, L. A. See Pew, A. E., jun.
- Tarbutton, G. See Cagle, W. C.
- Tarr, F. G. A., and Wilhelm, J. O., magnetic effects in superconductors, A., 573.
- See also Burton, F. F.
- Tarr, H. L. A. See Meldrum, N. U.
- Tarr, O. F., and Mutual Chem. Co., chromatcs, (P.), B., 269.
- Tarr, W. A., linnaite group of cobalt-nickel-iron-copper sulphides, A., 727.
- Tartakovski, M., rubber substitute from polymerides of chlorinated olefines, B., 1006.
- Tartakovski, P., energy level scheme for electrons in crystals, A., 1306.
- Tartar, H. V. See Huey, C. S., and Reed, R. M.
- Tarte, C. E., Mellett, D. S., and Socony-Vacuum Corp., distillation [of oils, etc.] under vacuum, (P.), B., 4.
- and Socony-Vacuum Oil Co., apparatus for contacting liquids, (P.), B., 1122.
- Tartler, G. See Messerschmidt, W.
- Tarvin, C. E. See Dodge, W. G.
- Tarvin, D., Todd, H. R., and Buswell, A. M., determination of free chlorine [in water], B., 128.
- Tase, S. See Takahashi, E.
- Tasker, C. See Maconachie, J. E.
- Tasman, A., formation of hydrogen from glucose and formic acid by "resting" *B. coli*. II., A., 1541.
- and Pot, A. W., formation of hydrogen from glucose and formic acid by "resting" *B. coli*. I., A., 1028.
- Tatarskaja, R. See Yakimov, P. A.
- Tatarski, M., manufacture of titanium dioxide from apatitospheno ores without the use of sulphuric acid, B., 403.
- Tate, J. T., and Smith, P. T., ionisation potentials and probabilities for formation of multiply-charged ions in alkali vapours and in krypton and xenon, A., 4. Attempt to observe a helium isotope, A., 6.
- Smith, P. T., and Vaughan, A. L., mass spectrum analysis of products of ionisation by electron impact in nitrogen and acetylene, A., 5. Mass spectrum analysis of products of ionisation by electron impact in nitrogen, acetylene, nitric oxide, cyanogen, and carbon monoxide, A., 1305.
- Tateishi, C., influence of sympathetic nerve poisons on glycosuria of splenectomised rabbits, A., 397. Influence of spleen extracts and bile acids on the sugar excretion threshold in rabbits with biliary fistula, A., 398. Influence of liver and spleen extracts and sympathetic nerve poisons on sugar excretion threshold of splenectomised rabbits, A., 398. Influence of liver-extract fractions on sugar excretion threshold, A., 398.
- Tatel, H. E. See Bradbury, N. E.
- Tatematsu, K., and Kubota, B., constitution of hydroxy-derivatives of diphenylene oxide, A., 220.
- See also Hata, K.
- Tatievskaja, E. P. See Tschufarov, G. I.
- Tatsuzawa, S., experimental acidosis. V. Acidosis and liver function, A., 1007.
- Tattersall, H. J. See Imperial Chem. Industries.
- Tattersfield, F., apparatus for testing contact insecticides, B., 167.
- and Martin, J. T., loss of activity of pyrethrum [dusts]. II., B., 39.
- See also Martin, J. T.
- Tatu, H., constitution of phenol-formaldehyde resins, B., 319.
- Tatum, A. L. See Pratt, T. W.
- Tatum, E. L., Peterson, W. H., and Fred, E. B., identification of asparagine as the substance stimulating the production of butyl alcohol by certain bacteria, A., 1282.
- Taub, L., chaulmoogric acids and their derivatives, A., 82.
- Taube, W. See Meyer, Julius.
- Taubenhaus, J. J., and Decker, P., sulphur as a fungicide, B., 568.
- Tauber, H., sensitive drop reaction for ascorbic acid, A., 903.
- and Kleiner, I. S., determination of ascorbic acid; vitamin-C content of various plant and animal tissues, A., 547. Enzymic determination of true vitamin-C, A., 1287.
- Kleiner, I. S., and Mishkind, D., ascorbic acid oxidase, A., 1023.
- Taubert, F., digestion coefficients of green fodders (oats, lucerne-clover mixtures) for working horses, B., 251.
- Taudivin & Gregson, Ltd. See Green & Co. (Ecclesfield), Ltd., W.
- Taupin, Masqué, St.-Marc, disposal of household refuse, (P.), B., 528.
- Taurinš, A., course of reaction between magnesium organic compounds and hydroxyazo-derivatives, A., 743. Determination of cobalt as a new complex compound, A., 951.
- Tausch, E. See Lehmann, E.
- Tauson, V. O., and Schapiro, S. L., oxidation of oil by bacteria, B., 1032.
- Taute, W., testing of lithopone, B., 1151.
- Tavares, G., calcium gluconate as a local anæsthetic, A., 655.
- Tavasei, B., constitution of Portland cement clinker, B., 150.
- Tawada, K., radiation from surface combustion, B., 178. Effect of ozone on spontaneous-ignition phenomena of gasoline, B., 935.
- Tawberidge, I. See Kandelaky, B.
- Tawde, N. R., interpretation of band spectroscopic results of nitrogen, A., 423. Gross intensities in electronic bands, with special reference to C_2 (Swan) and N_2 (second positive) systems, A., 1183.
- Taxner, C., influence of p_H on rate of yeast growth in a synthetic medium containing asparagine, A., 253.
- Taylor, A. E. See Whessoe Foundry & Eng. Co.
- Taylor, A. H. See Barber, A. T.
- Taylor, A. M. See Cameron, A. E.
- Taylor, C. W. See Taylor, E. H.
- Taylor, C. S. See Aluminum Co. of America.
- Taylor, D. D., modified Aston-type mass spectrometer and some preliminary results, A., 801.
- Taylor, E., standardisation of ammonium acetate solution for free lime determination, B., 497.
- Taylor, E. H., and Taylor, C. W., cold-process soaps, (P.), B., 913.
- Taylor, E. I. See Widdows, S. T.
- Taylor, E. L., indicator for the passage of food through the alimentary tract of animals, A., 652.
- Taylor, E. M., reclamation of salt and alkali land, B., 115.
- Taylor, Edith M., production of diphtheria toxin with high antigenic power, A., 1003. Culture medium for the production of diphtheria toxin, A., 1419.
- Taylor, E. O., electric heating, B., 29.
- Taylor, E. R. See Eastman Kodak Co.
- Taylor, F. H. L., and Jackson, H., jun., carbohydrate tolerance in cancer patients and the effect thereon of X-radiation, A., 1008.
- Taylor, F. J., water mains. IV. Corrosion: causes and prevention, B., 880.
- Taylor, F. S., forrohalides of pyridine and quinoline, A., 356.
- Taylor, G. C., and Flint Eaton & Co., preparation of medicine [for calcium therapy], (P.), B., 1069.
- Taylor, G. G. See Taylor, T. I.
- Taylor, G. I., theory of plasticity of crystals, A., 151.
- Taylor, G. L., Pre-Cambrian granites of the Black Hills, A., 602.
- See also Adair, M. E.
- Taylor, G. O., application of anodised aluminium and its alloys, B., 28.
- Taylor, G. R., high-pressure cracking unit [for petroleum oil], B., 438.
- Taylor, G. W., and Harvey, E. N., respiration of yeast in water containing deuterium oxide, A., 405.
- Taylor, H. See Keys, A. B.
- Taylor, H. A., and Herman, C. R., thermal decomposition of diethylamine, A., 1081.
- and Hook, A. van, polymerisation and hydrogenation of acetylene, A., 1082.
- Taylor, H. F., halibut-liver oil, B., 159.
- Taylor, H. J., tracks of α -particles and protons in photographic emulsions, A., 910. Disintegration of boron by neutrons, A., 1297. Radioactivity of samarium, A., 1440.

- Taylor, H. J., and Goldhaber, M., detection of nuclear disintegration in a photographic emulsion, A., 426.
See also Campbell, J. A.
- Taylor, H. M., properties of dipole and quadrupole radiation from nuclei, A., 1187.
- Taylor, H. S., transition point of sodium sulphate decahydrate, A., 447.
Variable activity of catalytic surfaces, A., 940.
and Diamond, H., spin-isomerisation of hydrogen in paramagnetic and diamagnetic surfaces, A., 1085. Catalytic exchange reaction between deuterium and water, A., 1085.
- and Jungers, J. C., exchange between ammonia and deuterium on catalytic iron surfaces, A., 710.
- Morikawa, K., and Benedict, W. S., exchange reactions of deuterium and methane under the influence of excited mercury, A., 457.
- and Ogden, G., adsorption of hydrogen and of carbon monoxide on a surface of zinc and molybdenum oxides, A., 27.
See also Bowman, P. I., Evans, M. G., Howard, J., Jungers, J. C., Morikawa, K., Selwood, P. W., and Turkevich, J.
- Taylor, H. W. See De Berry, C. R.
- Taylor, I. R. See Crescitelli, F.
- Taylor, J. See Imperial Chem. Industries.
- Taylor, J. A. See Yancey, H. F.
- Taylor, J. B., introducing oxygen into evacuated systems, A., 1218.
- Taylor, J. E. See Alderks, O. H.
- Taylor, J. H., contact metamorphic zone from the Little Belt Mountains, Montana, A., 726.
- Taylor, J. K. See Prescott, J. A., and Tilton, L. W.
- Taylor, J. R., jun., and Pierre, W. H., non-acid-forming mixed fertilisers. I. Effect on chemical and biological changes in the soil-fertiliser zone and on plant growth, B., 1108.
- Taylor, J. W. See Jones, J. W.
- Taylor, K. F. See Campbell, W. G.
- Taylor, L., treatment of paper [to render it more pliable, etc.], (P.), B., 301.
- Taylor, L. S., and Mohler, F. L., comparison of X-ray and γ -ray dosage, A., 677.
See also Mohler, F. L.
- Taylor, M. C., and Mathieson Alkali Works, Inc., stable calcium hypochlorite composition, (P.), B., 899.
- Taylor, M. W. See Russell, W. C.
- Taylor, N. B., Branion, H. D., and Graham, W. R., staining of recently deposited calcium by alizarin-red, A., 647.
See also Sykes, J. F.
- Taylor, N. O., and Syeco Smelting & Refining Co., precious-metal [dental] alloy, (P.), B., 999.
- Taylor, N. W. See Cole, S. S.
- Taylor, S. G. See Thompson, W. O.
- Taylor, T. C., Fletcher, H. H., and Adams, M. H., determination of the alkali-labile value of starches and starch products, B., 1064.
and Morris, S. G., amyloses; corn α -amylose and retrograded β -amylose, A., 965.
- Taylor, T. L., and Cone, W. H., influence of gases on silver sols, A., 1459.
- and Taylor, G. G., vapour pressure and dehydration of unstable salt hydrates; sodium perborate, A., 934.
- Taylor, T. W. J., configurations of disulphides of thianthren, A., 809.
and Coughtrey, W. C. J., charcoal as a catalyst of stereoisomeric change in disulphoxides, A., 1130.
- Taylor, W., kinetics of interactions of sodium hydroxide with the bromoethanes in ethyl-alcoholic solution, A., 1465.
and Ward, A. M., kinetics of interactions of sodium hydroxide with penta- and hexa-chloro- and -bromo-ethane in aqueous and ethyl-alcoholic solutions, A., 173.
- Taylor, W. C. See Corning Glass Works.
- Taylor, Wendall H., thiophenols. II. Reaction between aromatic mercaptals and formaldehyde, A., 970.
- Taylor, William H., crystal structure of methylene-blue, A., 1195.
- Taylor, W. I. See Brit. Celanese.
- Tazaki, M., prevention of corrosion of aluminium and its alloys, B., 460.
- Tazawa, T., determination of ferrous iron in materials containing metallic iron and ferric iron, A., 319.
- Tazawa, Y., synthesis of *d*-arginine anhydride and *d*-lysine anhydride and their ring fission by pepsin, A., 965.
- Tchakirian, A., action of potassium and sodium hydroxides on germanoformic acid, A., 51.
and Volkringer, H., Raman spectra of bromine compounds of germanium and tin, A., 1053.
- Tchang, H. L. See under Chang, H. L.
- Tchechinon, S., polychromatic reproduction and colouring masses, printing plates, and printing machines therefor, (P.), B., 702.
- Tchijevskaja, T. S. See Tchijevski, A. L.
- Tchijevski, A. L., and Tchijevskaja, T. S., aluminium as a factor contributing to the rise and progress of different pathological processes in the organism, A., 1533.
- Tchistov, V. O. See Uschakov, M. I.
- Tchitchonkin, M. See Favorski, M.
- Tchoubar, (Mlle.) B. See Tiffeneau, M.
- Teague, M. C., Brewster, N. H., and Naugatuck Chem. Co., fibrous material and treatment of [incorporation of rubber in] same, (P.), B., 354.
and Naugatuck Chem. Co., [rubber] latex adhesive, (P.), B., 468.
- Teale, V. M., and Richardson, M., bleaching cream, (P.), B., 384.
- Teatini, D., from the maximum to the minimum of lime [in beet-juice purification], B., 473. Filtering apparatus, (P.), B., 84. Controlling processes of evaporation or crystallisation, (P.), B., 130. Purification of sugar-factory and refinery juices, (P.), B., 970.
- Techen, E., coating of base materials of all kinds [with metal powders], (P.), B., 157.
- Techner, F., depigmenting effect of vitamin-C, A., 1176.
- Technical Research Works, Ltd., Bolton, E. R., Williams, K. A., and Mitchell, H. R., production of metallic catalysts by electrolytic methods, (P.), B., 506.
- Technicolor, Inc. See Weaver, E. A.
- Technicolor Motion Picture Corporation. See Ball, J. A.
- Teets, D. E., and Andrews, D. H., studies with vibrating mechanical models. I. Benzene, toluene, and phenyl halides, A., 568.
- Tefft, R. F. See McGavack, J.
- Tei, L. J. See Bone, W. A.
- Teichmann, C. F. See Texas Co.
- Teichmann, H., method of working of counter tubes and gas-filled photo-cells, A., 282.
- Teik, G. L., frothing of groundnut oil, B., 463.
- Teilum, G., serum-cholesterol during pregnancy, A., 517.
- Teindl, J. See Glazunov, A.
- Teis, E. V., and Vagner, O. R., determination of small concentrations. VII. Potentiometric acid and alkali determinations, A., 182.
- Teis, R. V., iodometric studies. III. Significance of concentration of iodide in dilute iodine solutions, A., 717.
- Teisinger, J., biochemistry of lead in blood, A., 781.
- Telefunken Gesellschaft für drahtlose Telegraphie m.b.H., electron-discharge devices, (P.), B., 1101, 1149.
- Telegraf, V. See Latschinov, S.
- Telegraph Condenser Co., Ltd. See Sporing, P. A., and Stephan, F. C.
- Telegraph Construction & Maintenance Co., Ltd., Garnett, H. J., and Smith, F. H., nickel-iron alloys, (P.), B., 235.
and Heraeus-Vacuumschmelze A.-G., [nickel-iron] magnetic alloys, (P.), B., 235.
- Randall, W. F., and Smith, F. H., magnetic [nickel-iron] alloys, (P.), B., 956.
- Teleshkin, N. A., and Prokopenko, J. N., utilisation of waste from the manufacture of acetic acid, B., 1036.
- Tellegen, F. P. A., isomerism. I and II, A., 191, 324. Bruto-isomerism, A., 324.
- Teller, E., and Topley, B., vibration frequencies of ethylene and ethane, A., 1053. Equilibrium and heat of the reaction $C_2H_4 + H_2 = C_2H_6$, A., 1076.
See also Kalckar, F.
- Teller, G. L., changes in nitrogen compounds in the wheat grain at different stages of development, A., 1549. Fruit-flavoured food, (P.), B., 252.
- Teller, W. K., and Western Bottle Manufg. Co., moisture-resistant bristles for brushes, etc., (P.), B., 96.
- Temerin, S. See Proskuriakov, N.
- Temkin, M., gas adsorption and Nernst's heat law, A., 696. Diffusion of heavy water into ordinary water, A., 1313.
and Bakh, A. N., adsorption of hydrogen by palladium in presence and absence of water, A., 1068.
and Puzhov, V., oxidation of nitric oxide at low pressures, A., 593.
- Temnikova, (Mme.) T. I. See Favorski, A. E.
- Temple, G., fundamental paradox of the quantum theory, A., 804.
- Templeton, H. L., and Sommer, H. H., use of citric acid and sodium citrate in buttermaking, B., 571. Sodium metaphosphate as an emulsifying agent [for processed cheese], B., 1161.
- Tendeloo, H. J. C., adsorption electrodes. II. Mineral electrodes, A., 706.
See also Bär, A. L. S.
- Tendler, M. J. See Amberson, W. R.
- Tenenbaum, D. See Smith, L. I.
- Tener, R. F., and Holt, W. L., effect of antioxidants on natural and accelerated ageing of rubber, B., 862.
- Tengler, J. See Tengler, (Mrs.) J.
- Tengler, (Mrs.) J., and Tengler, J., coating and binding agent containing rubber, (P.), B., 1056.

- Tennant, R. See Thompson, W. R.
 Tennessee Copper Co. See Burns, R. R.
 Tennessee Products Corporation. See Carlin, J. C.
 Tenney, G. I., carburetted water-gas generator, (P.), B., 439.
 Tenney, H. M. See Copley, M. J.
 Teodoru, H. See Steopoe, A.
 Téodoru, M. See Nitzulescu, J.
 Teorell, T., "diffusion effect" on ionic distribution. I. Theoretical considerations, A., 699. Arrangement for studying conditions within diffusion layers, A., 931.
 Ter-Mikaeliantz, E. I. See Kukolev, G. V.
 Terada, B., and Tainter, M. L., metabolic response of white rats to continued administration of dinitrophenol, A., 1275.
 Terada, T., and Yamamoto, Ryuzo, cataphoresis of Chinese ink in water containing deuterium oxide, A., 1075.
 Yamamoto, Ryuzo, and Watanabe, Tetsu, colloid nature of Chinese black ink. II., B., 860.
 Terai, K., influence of oxidation-reduction systems on adrenaline action. I. and II., A., 900, 1422. Influence of amino-acids on action of adrenaline, A., 1172.
 Teräsvuori, A. See Tuorila, P.
 Terebesi, L., electrometallurgy of aluminium, B., 362.
 See also Treadwell, W. D.
 Terekhov, A. M. See Tschistov, I. F.
 Terekhov, K. See Jakubovitch, S.
 Terenin, A., internal recombination during photo-dissociation of polyatomic molecules, A., 682, 807. Photochemical reactions of adsorbed iodine molecules, A., 943.
 and Prileshaeva, N., photo-dissociation of vapours of some organo-metallic compounds, A., 1052.
 See also Prileshaeva, N.
 Terentiev, A. P., Klimova, V. A., and Puzireva, V. P., determination of o-nitroaniline in presence of large quantities of p-nitroaniline, B., 182.
 Terényi, A. See Bodnár, J.
 Tereschtschenko, A. See Finkelstein, V. S.
 Terlet, H., and Briau, A., analysis of phosphatic fertilisers, B., 198.
 Terlikowski, F., Byczkowski, A., and Sozanski, S., influence of form of potassium fertilisation on chemical composition of plants, B., 116.
 and Milkowski, K., influence of boron compounds on growth of plants, B., 967.
 Terpugov, J., oxidation of pine oils, B., 524.
 Terpugov, L. See Sabinina, L. E.
 Terpstra, P. See Beintema, J., and Klasens, H. A.
 Terres, E., formation of coal, B., 435.
 and Rost, A., coal ash; form of combination of the inorganic constituents and the true ash content, B., 389.
 Tija, H. A., Herrmann, W., Johswich, F., Patscheke, G., Pfeiffer, J., and Schwarzmann, H., thermal principles of distillation and coking of brown coal, B., 339.
 and Vollmer, W., solubility of constituents of mineral oil and tar in liquid hydrogen sulphide, B., 581.
 Walther, C., Schmidt, H., Pomeraniec, J., and Focsaner, O., cracking of hydrocarbons and petroleum, B., 391.
 Terrien, J., absorption and fluorescence of the vapours of cuprous halides, A., 681.
 Terroine, E. F., relative value of proteins in feeding, A., 112. Comparative value of fat and carbohydrate in utilisation of protein, A., 1015.
 Mezincesco, M., and Valla, S., cystine metabolism: its rôle in nitrogen metabolism, intestinal absorption, and oxidation coefficient, A., 1272.
 and Razafimahery, R., partition of excreted sulphur in relation to metabolism, A., 389.
 Terry, G. E., and King, R. M., mechanics of enamel suspension. I. Exchangeable base and viscosity measurements on some Vallendar clays, B., 630.
 Terry, R. W., biological product [pullorin], (P.), B., 925.
 Terwen, A. J. L., and Quelle, H. J., bacteriology of milk electro-pasteurised by the Aten method, B., 426.
 Terzaghi, R. D., origin of potash-rich rocks, A., 601, 1099.
 Terzian, H. G., and United Gas Improvement Co., mixed oil gas and water-gas, (P.), B., 134, 439, 757, 982.
 Tesarz, J. See Gatty-Kostyal, M.
 Tessieri, I. See Mayer, C. P.
 Tesson, F., liquid-type micro-cathetometer, A., 467.
 Test, L. A., inorganic colouring materials for cellophane, B., 398.
 Testoni, G., and Ciusa, W., diacetyl in butter, B., 378.
 Testoni, P., influence of the sulphur mineral water of Tivoli (Acque Albule) on content and distribution of glutathione in the organs, A., 646. Elementary actions of mineral waters, A., 1023.
 Teterin, V., and Ivanov, A., synthesis of vitamin-A. I. Action of magnesium on a mixture of ionone and α -dibromo- Δ^4 -butene, A., 979.
 Tetley, F. W. See Swift, Levick & Sons, Ltd.
 Tetrault, M., electrolytic apparatus, (P.), B., 774.
 Tetrick, J. D., white ground-coats [enamels], B., 149. Opacity development in cover enamels for sheet steel, B., 1093.
 See also Danielson, R. R.
 Tettamanzi, A., reaction of copper with benzidine and new method of determining traces of copper, A., 837. Relation between the behaviour of ethylolamine, propylolamine, and butylolamine and their p_H , A., 849. Metal ammine salts from benzidine sulphate, A., 854.
 Tettweiler, K., and Drishaus, I., constitution of the aromatic rearrangement products of picrotoxin, A., 1364.
 Tetzner, E. See Abderhalden, E.
 Teunissen, P. H. See De Jong, H. G. B.
 Teves, M. C. See De Boer, J. H.
 Te Winkel, H. M. See Haywood, C.
 Texaco Salt Products Co. See Martin, O. V.
 Texas Co., and Behimer, O., treating hydrocarbon oils, (P.), B., 663. Conversion of hydrocarbon oils, (P.), B., 663.
 and Clarke, L. A., treatment of hydrocarbon oils, (P.), B., 713.
 Clarke, L. A., and Cook, L. W., alcohols, (P.), B., 1085.
 Cole, H. S., jun., and Cox, E. R., recovery of gasoline from natural gas, (P.), B., 89, 486.
 and Cox, E. R., recovery of gasoline from natural gas, (P.), B., 486.
 and De Florez, L., cracking of [hydrocarbon] oil, (P.), B., 217.
 Texas Co., and Dixon, E. S., [steel] apparatus for cracking hydrocarbon oils, (P.), B., 180.
 and Gallsworthy, B., lubricant, (P.), B., 217. Cutting fluid, (P.), B., 346. Cutting oils, (P.), B., 1083.
 and Gray, J. W., distillation [of hydrocarbon oils], (P.), B., 11. Treatment of hydrocarbon oils, (P.), B., 296.
 and Gross, H. H., refining of hydrocarbon oils, (P.), B., 295.
 and Hall, F. W., refining of [hydrocarbon] oils, (P.), B., 617.
 and Holmes, W. K., treatment of hydrocarbon oils, (P.), B., 893.
 Holmes, W. K., and Dudley, A. T., apparatus for fractionating hydrocarbon oils, (P.), B., 296.
 Jenkins, V. N., and Stratford, W. M., treatment of hydrocarbon oils, (P.), B., 90.
 and Kaufman, G., grease and method of lubrication, (P.), B., 109. [Lubricating] grease, (P.), B., 733, 1102.
 Kaufman, G., and Lauer, C. E., treatment of hydrocarbon oil containing naphthenic acids, (P.), B., 1127.
 and Kendall, M. T., solvent refining of hydrocarbon oil, (P.), B., 712.
 and Langworthy, M. L., dewaxing of hydrocarbon oil, (P.), B., 136.
 McCarty, B. Y., and Skelton, W. E., removal of wax from hydrocarbon oil, (P.), B., 617.
 and MacKay, C. W., treatment of hydrocarbon oils, (P.), B., 11.
 and Manley, R. E., separation of wax from hydrocarbon oils, (P.), B., 936.
 Manley, R. E., and Gross, H. H., refining of hydrocarbon oil, (P.), B., 713.
 Manley, R. E., and Kuoss, A. F., dehydration of oil [emulsions], (P.), B., 486.
 and Moore, W. F., cracking of oils, (P.), B., 892.
 and Oosterhout, J. C. D., desulphurisation of recovered petroleum phenols, (P.), B., 940.
 Rees, H. V., and Teichmann, C. F., [desulphurising] treatment of hydrocarbon oils, (P.), B., 136.
 and Stratford, W. M., treatment of hydrocarbon oils, (P.), B., 56, 90, 181. Treating [distillate hydrocarbon] oils, (P.), B., 135. Solvent extraction of hydrocarbon oil, (P.), B., 346.
 and Towne, C. C., treatment of hydrocarbon oils, (P.), B., 296.
 and Wakefield, L. L., method of consuming fumes, (P.), B., 1122.
 and Walker, J. B., lubricant testing and demonstrating device, (P.), B., 1128.
 and Webre, J. B., cracking of hydrocarbon oils, (P.), B., 663.
 Texas Gulf Sulphur Co. See Hamor, W. A.
 Textilwerk Horn A.-G., light waterproof fabrics, (P.), B., 766.
 Tezuka, K. See Uchida, S.
 Thackeray, A. D., chromospheric emission in the wings of H and K, A., 1046.
 Thackwell, F. E. See Head, R. E.
 Thaler, H., microscopy of bee honey, B., 875.
 and De Mingo, M., determination of free acid in strongly coloured [alimentary] liquids, B., 875.
 See also Täufel, K.

- Thanheiser, G., and Dickens, P., application of potentiometric volumetric analysis in the ironworks laboratory. VI. Determination of sulphur in iron, steel, iron alloys, slags, and ores, B., 26. See also Bardenheuer, P.
- Thannhauser, S. J., lipoidosis, A., 1009. See also Klein, W.
- Thatcher, B. W. See Mavor, J. W.
- Thatte, V. N., magnetic double refraction and light scattering in fused nitrates, A., 1448.
- and Joglekar, M. S., Raman spectra of amides and anilides in the fused state. I., A., 914.
- Thau, A., desulphurisation of coke-oven gas, B., 292. Gas for synthetic purposes from low-grade fuels, B., 389. Continuous regeneration of benzol wash oil, B., 385. [Brown coal] distillation and synthetic gas preparation for [liquid] fuel production, B., 1124.
- Thayer, F. D. See Highberger, J. H.
- Thayer, S. A. See Doisy, E. A.
- Thaysen, A. C., preservation of stock cultures of micro-organisms, A., 237.
- Theilacker, W., calculation of refractive index of guanidinium iodide, A., 568. Crystal structure of guanidonium halides. II. Structure of guanidonium iodide, $C(NH_2)_3I$. III. Structure of guanidonium bromide, $C(NH_2)_3Br$, A., 571, 921.
- Theillier, F. E., and David, L. M. M., helical agitator for purifying saccharine juices, (P.), B., 474.
- Theis, E. R., and Serfass, E. J., pickling [of skins]. V. Effect of volume ratio on acid and salt adsorption by bated skin. VI. Effect of various pickles on chromium absorption during chrome-tanning, B., 563, 644. Chrome-[tanning] liquors. II. Determination of olation. III. Penetration of anions into the chromium nucleus. IV. Chemical characteristics of some sucrose-reduced liquors, B., 564, 862, 1105.
- Theiss, H., creatine metabolism and ovarian function, A., 517.
- Theissing, H., simple process for absolute calibration of photo-cells, A., 1475.
- Theisz, N., and Egyesült Izzólámpa és Vellamossági Részvénytársaság, electrodeposition of alkaline-earth compounds on metal [for making electron-emission devices], (P.), B., 236.
- Thelin, G., and Beaumont, A. B., effect of some forms of nitrogen on growth and nitrogen content of wheat and rice plants, B., 325.
- Them, H. See Carbic, Ltd.
- Themlitz, R. See Blanck, E.
- Theobald, L. S. See Hume, W. F.
- Théodorovitch, R. L. See De Kolosovski, N.
- Theophilus, D. R., standardising milk for manufacture of Cheddar cheese, B., 43. Heat-resistant organisms in evaporated milk, B., 1066.
- Theorell, H., cataphoresis apparatus, A., 188. [Nature of] mixtures of respiratory enzymes with substrates, A., 248. Active group of yellow enzyme, A., 248. [Nature of] respiratory co-enzyme of red blood-cells, A., 248. Acid groups of respiratory co-enzyme, A., 248. Preparation in the pure state of active grouping of the yellow enzyme, A., 400. Restriction by phosphate of rate of reaction in Warburg and Christian's system, A., 400.
- Theorell, H., yellow oxidation enzyme, A., 1024. Cataphoresis apparatus for preparative purposes, A., 1024. Pure cytochrome-c, A., 1277. Quantitative irradiation experiments with the yellow enzyme, flavinphosphoric acid, and lactoflavin, A., 1277.
- Karrer, P., Schöpp, K., and Frei, P., flavinphosphoric acid from liver, A., 1521.
- Therault, E. J., activated sludge as a bio-zoelite, B., 752. Sewage treatment. III. Clarification, B., 927.
- Thermal Industrial & Chemical (T.I.C.) Research Co., Ltd., Chadder, W. J., and Millener, W. H., fractional condensation of vapours derived from distillation of liquids, (P.), B., 1027.
- and Condrup, C. O., treatment of tars, (P.), B., 1033.
- Thermal Syndicate, Ltd., and Moore, B., concentration or absorption towers, (P.), B., 1076.
- Thermo Electric Co. See Hermann, O.
- Thern, L., dyeing of stockings, B., 449.
- Theron, J. J., and Niekerk, P. van, nature and origin of black turf soils, B., 964.
- Thewalt, J. See Dilthey, W.
- Thewlis, J., crystal orientation in tooth enamel, A., 511.
- Thews, E. R., ternary aluminium-copper hardeners, B., 191. Use of scrap copper, bronze, and brass in the foundry, B., 500.
- Thibault, N. W., celestite from Chittenango Fall, New York, A., 726.
- Thibodeau, W. E., and McPherson, A. T., photo-elastic properties of soft, vulcanised rubber, B., 321.
- Thiebe, J., purification of [beet-sugar] juices by means of hyposulphites, B., 39. Treatment of [beet] juice with lime and hyposulphites, B., 920.
- Thieffry, S. See Bonnet, H.
- Thiel, A., recent development of colorimetric technique and allied processes of measurement, A., 947.
- and Greig, D., indicators. XXV. Alcohol error of indicators, A., 585.
- and Kayser, C., corrosion phenomena. XVIII. Localisation of inhibiting action of surface-active substances in solution of metals in acids, A., 41.
- and Schulz, G., indicators. XXIV. Protein error of indicators, A., 38.
- and Siebeneck, H., thermal dissociation and vapour pressure of boric acid and its volatility in water vapour, A., 24.
- Thiel, K., Ruhnau, A., and Unger, A., absorption of insulin, A., 127.
- Thiel, W., detection and determination of urinary porphyrin, A., 379. See also Krause, O.
- Thiele, E. W., application of the graphical method of Ponchon to distillation and extraction, B., 577. See also Fitzsimons, O.
- Thiele, F. See Hüchel, W.
- Thielepape, E. [with Fulde, A.], N-methylation of acetanilides, A., 854.
- Thiemann, W. See Benrath, A.
- Thieme, J. G., reliability of the polarisation balance [in chemical control of cane-sugar manufacture], B., 693.
- Thiemecke, H., cone-10 raw crystal glaze, B., 149.
- Thier, W. See Seidel, F.
- Thierfelder, K. See Schöpi, C.
- Thiers, H., extraction from urine of a substance possessing biological properties of Oriol's "substance P," A., 234. Extraction from bile of a substance possessing biological properties of Oriol's "substance P," A., 234.
- Thiesing, corrosion [of metals]. V. Corrosion and water-mains, B., 770.
- Thiesse, X., preparation and properties of sodium ferroate, A., 314.
- Thiessen, G., behaviour of sulphur during coal carbonisation, B., 580.
- Thiessen, G. W., and Frost, L. J., constant-temperature bath employing thermionic control, A., 465.
- Thiessen, L. See Houghton, F. C.
- Thiessen, P., biological demonstration of thyroid hormone in blood of pregnancy; limitation of activity of thyrotropic hormone of anterior pituitary, according to investigations on thyroid-deficient animals, A., 258.
- Thiessen, P. A., and Wittstadt, W., crystals and melt in stretched rubber, A., 1308.
- Thiessen, R. See Arnold, C. L., Fieldner, A. C., and Sprunk, G. C.
- Thilo, F. See Kühl, Hugo.
- Thilo, K. See Horrmann, P.
- Thimann, K. V., and Koepfli, J. B., identity of growth-promoting and root-forming substances of plants, A., 418. See also Bonner, J.
- Thiry, G., elimination of mineral acid from pickled pelt during vegetable tanning, B., 281.
- Thivolle, L. See Fontés, G.
- Thode, H. G. See Freed, S.
- Thole, F. B. See Anglo-Iranian Oil Co.
- Thoma, A., continuous absorption by alkalis, A., 799. Matrix elements for alkali metals, A., 1187.
- Thomann, G. See Ruzicka, L.
- Thomann, J. [with Kälin, and Pfeiffer], determination of vioform in bandages, B., 1163.
- Thomas, A. G. See Loeper, M.
- Thomas, A. G., viscosimeter, (P.), B., 178.
- Thomas, A. M., and Wedmore, E. B., preparation of colloidal metals, A., 932.
- Thomas, A. W. See Clayton, B.
- Thomas, Arthur W., solutions of basio salts of aluminium, B., 493.
- and Kremer, C. B., hydrous thoria hydrosols considered as polynuclear basic thorium complexes, A., 1459.
- and Owens, H. S., basic zirconium chloride hydrosols, A., 1459.
- and Vartanian, R. D., action of acids on hydrous alumina, A., 296.
- Thomas, B., composition of draw-moss, B., 922.
- Thomas, B. D. See Thompson, T. G.
- Thomas, B. H., and Cannon, C. Y., influence of diet on antirachitic potency of cow's milk, A., 1431.
- Culbertson, C. C., Ramsbottom, J. M., and Hammond, W. E., comparative efficacy of "diapho," bonemeal, and limestone when fed as mineral supplements to rations for pigs, A., 654.
- and Quackenbush, F. W., effect of diet on the quantity of vitamin-A and -D occurring in hens' eggs, A., 1428.
- Thomas, C. Allen, Carmody, W. H., and Dayton Synthetic Chemicals, Inc., resin from petroleum hydrocarbons, (P.), B., 1056.
- and Dayton Synthetic Chemicals, Inc., prepared resin, (P.), B., 1153.

- Thomas, C. Allen, Hochwalt, C. A., and Thomas & Hochwalt Labs., composition for removing carbon deposits [from internal-combustion engines], (P.), B., 90.
- Olin, J. F., and Sharples Solvents Corp., acid amides, (P.), B., 139.
- Swan, J. H., and Gardner-Richardson Co., paper, (P.), B., 223.
- See also Hochwalt, C. A., and Sharples Solvents Corp.
- Thomas, C. Aubrey, protecting mushroom-grain spawn against springtails and other pests, B., 743.
- Thomas, C. A. G., and Adderley, J. R., characteristics of fireclay with special reference to manufacturing difficulties, B., 851.
- Thomas, C. G. See Nachtman, J. S.
- Thomas, C. N., acidimetric method for determining salicylic acid and its salts, A., 228.
- Thomas, D., and Thomas & Clement, Ltd., water-softening apparatus, (P.), B., 930.
- Thomas, E. B., and Wood, L. J., reactions between dry inorganic salts. II., A., 832.
- Thomas, E. E., effect of chlorides in soil on avocado trees, B., 373.
- Thomas, E. F., toxicity of species of *Crotalaria* seed for chicken, quail, turkey, and dove, A., 657.
- Thomas, E. N. M., and Hewitt, J., molecular structure in sisal, coir, and oak, A., 1061.
- Thomas, F. L. See Roney, J. N.
- Thomas, G. E. A., and Emlyn Anthracite Colliery, Ltd., screening appliances for coal, etc., (P.), B., 892.
- Thomas, H. A. See Rendell, L. P.
- Thomas, H. C. See Harned, H. S.
- Thomas, H. C. H., relationship of mud to electrical coring, A., 1347.
- Thomas, I. See Petherbridge, F. R.
- Thomas, Jacques, and Bigwood, E. J., porphyrins appearing in chloroma and myeloid leucemia, A., 516.
- See also Bigwood, E. J.
- Thomas, Jefferson, citrus waste for live-stock-feeding, B., 1162.
- Thomas, J. B., regulation of respiration of *Lumbricus*, A., 1141.
- Thomas, J. L., gold-chromium resistance alloys, B., 232. Gold-cobalt resistance alloys, B., 771.
- Thomas, J. S. See Baxter, G. P.
- Thomas, L. H., interaction between a neutron and a proton and structure of H^3 , A., 1049.
- See also Schiff, L. I.
- Thomas, M. See Hänlein, W.
- Thomas, Margaret. See Pearce, J. N.
- Thomas, M. D., and Hill, G. R., jun., absorption of sulphur dioxide by lucerne and its relation to leaf injury, A., 1436.
- Thomas, P. E. See Fosse, R.
- Thomas, R. See Bowen, J. L.
- Thomas, R. E. See Du Pont de Nemours & Co., E. I.
- Thomas, S. B., and Swift, T. B., sponge-iron kiln, (P.), B., 1098.
- See also Maier, C. G.
- Thomas, U. B. See Haring, H. E.
- Thomas, W., mineral composition of plants, A., 422.
- Thomas, W. H., Chisholm, R. A. E., and Cameron, A. B., estimation of [effective] porosity of limestone, B., 947.
- Thomas & Clement, Ltd. See Thomas, D.
- Thomas & Hochwalt Laboratories. See Thomas C. Allen.
- Thomas-Welzow, M. See Keppeler, G.
- Thomassen, L., and Wilson, J. E., broadening of X-ray lines of cold-worked aluminium, A., 16.
- Thomis, G. N., and Jatrides, D., determination of alkaloids in solutions for injection, B., 1117.
- Thommen, H., conversion of acetaldehyde into acetic acid, B., 261.
- Thompson, A. F., jun. See Gould, R. G., jun.
- Thompson, A. J. See Wartman, F. S.
- Thompson, D. J., using zinc for brown-rot gummosis [on lemons], B., 568.
- Thompson, F. B. See Aston, B. C.
- Thompson, F. C. See Atkin, W. R., and Herbert, A. M.
- Thompson, G. W., Sheaff, E. H., and Nat. Lead Co., refining white-metal scrap, (P.), B., 505.
- Thompson, H. A., separators for liquids having different sp. gr., (P.), B., 84.
- Thompson, Herbert E., jun., solubility of lead in mercury, A., 928.
- Thompson, Howard E., and Burk, R. E., polymerisation of styrene, citral, and heptaldehyde, A., 739.
- Thompson, H. H., and Davies, A. E., magnetic separators, (P.), B., 911.
- Thompson, H. W., cockchafer beetle: incidence and control, B., 168.
- Thompson, Harold W., absorption spectra of some polyatomic molecules containing methyl and ethyl radicals, A., 1183.
- and Frewing, J. J., thermal decomposition of acetaldehyde, A., 172, 1464. Absorption spectra of substances containing alkyl radicals, A., 680.
- Kearton, C. F., and Lamb, S. A., kinetics of the reaction between carbonyl sulphide and water, A., 1207.
- and Linnett, J. W., spectrum of acetaldehyde, A., 145.
- See also Garratt, A. P.
- Thompson, Harry W. See Standard Oil Co. of California.
- Thompson, Henry William, is Diels' hydrocarbon, " $C_{18}H_{16}$," a pure single substance? A., 75.
- Thompson, J., influence of calcium and iodine on growing rats, A., 393.
- Thompson, J. F. See Davis, A. B.
- Thompson, J. G., effect of cold-rolling on indentation hardness of copper, B., 231.
- Thompson, J. H. C., spectrum of the normal frequencies of a polar crystal lattice. I. General theory, A., 917.
- See also Born, M., and Eceles, J. C.
- Thompson, J. J. See Willard, H. H.
- Thompson, J. W. See Angus, W. R., and Bailey, C. R.
- Thompson, L. G. See McKesson, C. L.
- Thompson, M. de K., current-producing reaction of the Leclanché cell, B., 957.
- and Kaye, A. L., decomposition potentials and conductivities of magnesium oxide and of the alkaline-earth oxides in fused fluorides, A., 584.
- and Rice, C. W., jun., hydrogen over-voltage and anodic behaviour of tungsten in aqueous solutions of potassium hydroxide, A., 171.
- Thompson, M. R., analysis of alkaline tin-plating solutions, B., 502.
- Thompson, Marvin R., active constituents of ergot, A., 894. New active principle of ergot, A., 1157. Ergostetrine, A., 1512.
- See also Landsberg, J. W.
- Thompson, N., effective rotation temperature of the negative glow in nitrogen, A., 799.
- and Williams, S. E., excitation potential of nitrogen second positive bands, A., 271.
- Thompson, P. F., and Alabaster, E. C., organic [external] indicator for dichromate titrations, A., 721.
- Thompson, P. J. See Forsee, W. T., jun.
- Thompson, P. K. See Thompson, W. O.
- Thompson, R. See Thompson, W. R.
- Thompson, R. C. See Jenkins, J. M.
- Thompson, R. H. S., and Johnson, R. E., blood-pyruvate in vitamin- B_1 deficiency, A., 669.
- See also Johnson, R. E., and Peters, R. A.
- Thompson, R. R. See Dillingham, F. T.
- Thompson, R. W., control of the tarnished plant bug, *Lygus pratensis*, L., in celery, B., 919.
- Thompson, T. G., and Robinson, R. J., sea-water of the Puget Sound region, A., 724.
- Thomas, B. D., and Barnes, C. A., distribution of dissolved oxygen in the north Pacific ocean, A., 600.
- and Wilson, T. L., occurrence and determination of manganese in sea-water, A., 464.
- See also Carter, N. M., and Wirth, H. E.
- Thompson, V. See Bodine, J. H.
- Thompson, W. A. R., plasma-proteins and cardiac oedema, A., 650.
- Thompson, W. L., non-arsenical stomach poisons for grasshopper and beetle control, B., 118. Termites as a pest of citrus trees, B., 423.
- See also Miller, R. L.
- Thompson, W. O. Thompson, P. K., and Dickie, L. F. N., effect of alkali on absorption of a peptide of thyroxine from the gastro-intestinal tract, A., 900.
- Thompson, P. K., Taylor, S. G., and Dickie, L. F. N., oral and duodenal administration of single large doses of pure thyroxine; comparison of calorigenic effects with those of monosodium thyroxine and thyroxine in alkaline solution, A., 258.
- Thompson, P. K., Taylor, S. G., Nadler, S. B., and Dickie, L. F. N., compounds that affect basal metabolism in man, A., 1171.
- Thompson, W. R., preparation of starch substrates for amylase determinations, A., 783.
- Tennant, R., and Wies, C. H., starch-amylase viscosimetry. I. Determination of amylolytic activity applicable to human serum, A., 402.
- and Thompson, R., protective action in ultra-violet irradiation of amylase solutions, A., 1024.
- See also Hussey, R.
- Thompson, W. S. See Griem, W. B.
- Thomsen, A. M., and Kohler & Chase, use of lime in precipitation [of metal hydroxides], (P.), B., 991.
- Thomsen, L. C., composition control of butter, B., 698.
- Thomson, A. E. See Harde, E.
- Thomson, D. L. See Black, P. T., Collip, J. B., and Selye, H.
- Thomson, D. W. See Butler, J. A. V., and Orr, W. J. C.
- Thomson, G., effect of peroxides and acids on reduction of olefines in alcohol solution with platinum oxide catalyst, A., 192.

- Thomson, G. M., treatment of vermiculite, (P.), B., 306. Heat-insulating material, (P.), B., 853.
- Thomson, G. N., [withering] treatment of tea leaf, (P.), B., 173.
- Thomson, G. P., electron diffraction as a method of research, A., 687. Apparatus for electron diffraction at high voltages, A., 1341.
See also Paneth, F. A.
- Thomson, J., initiation of the high-frequency discharge [in hydrogen], A., 1184.
- Thomson, J. K., and Wilson, F. J., arylamides of β -arylaminoacetic acids. II, A., 335.
- Thomson, J. R. See Snapp, O. I.
- Thomson, M. G. See Imperial Chem. Industries.
- Thomson, R., sudburite, a metamorphic rock near Sudbury, Ontario, A., 1344. "Offset dikes" of the nickel intrusive, Sudbury, Ontario, A., 1344.
- Thon, N., capacity of polarised mercury electrode at very low frequencies, A., 305. Constitution of double layer and appearance of the potential curve in electrolytic neutralisation of metallic ions, A., 585. Nature of the residual current observed with Zlotowski's moving cathode, A., 705. Polarisation capacity and constitution of the conducting layer at the electrode, A., 1079.
- Thor, C. J. B., and Smith, C. L., seasonal changes in composition of pecan during fruit development, A., 904.
- Thorbjarnarson, T., liver oil of Norway haddock (*Sebastes marinus*), B., 1003.
- and Drummond, J. C., occurrence of an unsaturated hydrocarbon in olive oil, B., 276.
- Santos Ruiz, A., and Drummond, J. C., selective adsorption in examination of unsaponifiable matter of marine oils, B., 733.
- Thorburn, R. R. See Moore, M. M.
- Thordarson, W., insecticide and fertiliser, (P.), B., 869.
See also Curtin, L. P.
- Thormälen, E., fluorosis in cattle; administration of sodium carbonate, sodium hydroxide, and flue dust, B., 168.
- Thorn, S. T. See Barkenbus, C.
- Thornberry, H. H., effect of phosphate buffers on infectivity of tobacco mosaic virus, A., 1182. Filtration of tobacco mosaic virus, A., 1182.
- Thornelife Coal Distillation, Ltd. See Greenfield, G. J.
- Thorndike, E. M., water-cooled resistors, A., 321.
- Thorne, B. See Myers, C. N.
- Thorne, C. B., apparatus for manufacture of [wood] pulp, (P.), B., 721.
- Thorne, W. F., thio-bacterial action in [gas] purifiers, B., 390.
- Thornton, A. C., taste and odour troubles in Bulawayo water, with special reference to use of activated carbon, B., 127.
- Thornton, A. R., recent developments in printing ink driers, B., 684.
- Thornton, H. G., and Nicol, H., nitrogen uptake of grass grown with lucerne, B., 38.
- Thornton, H. R., milk contamination and the methylene-blue reduction test, B., 874.
- and Sandin, R. B., standardisation of the methylene-blue reduction test by the use of methylene-blue thiocyanate, A., 1524.
- Thornton, H. R. See also Wood, F. W.
- Thornton, M. K., jun., cottonseed, B., 275.
- Thornton, N. C., carbon dioxide storage.
- VIII. Chemical changes in potato tubers resulting from exposure to carbon dioxide, A., 1177.
- Thornton, R. L., Stark intensities in a canal-ray source at different pressures, A., 908.
See also Lawrence, E. O.
- Thornton, S. F., available phosphorus and potassium contents of surface soils and subsoils as shown by the Neubauer method and by chemical tests, B., 515.
- and Kraybill, H. R., available potash content of fertiliser residues extracted according to the official method, B., 741.
See also Kraybill, H. R.
- Thornton, W. M., jun., and Roseman, R., determination of iron in presence of titanium; an aeration process, A., 720.
See also Roseman, R.
- Thorpe, F., jun. See Torrey, J. P.
- Thorpe, W. C., graphite lubricant, (P.), B., 217.
- Thorpe, W. S., obtaining composite coatings of two or more metals, (P.), B., 236.
- Thorvaldson, T. See Johansson, O. K., and Vigfusson, V. A.
- Thron, H., and Dirscherl, W., simple separation of *Cinchona* alkaloids from their dihydro-bases, A., 366.
See also Dirscherl, W.
- Thrun, W. E., acidity of karaya gum solutions, B., 1160.
- and Fuller, H. V., karaya gum; apparent viscosity of its aqueous solutions, B., 1160.
- Thümen, E. See Weyl, W.
- Thürmer, A., melt properties of various raw materials for glass, B., 629.
- Loss of fluorine from enamel melts, B., 630.
- and Voigt, H., staining power of mineral pigments in paints and vitreous enamels, B., 774.
- Thums, K. See Satke, O.
- Thunberg, T., zinc and cadmium as stimulators of oxidation processes in certain plant-seed extracts, A., 1038.
- Thurm & Besckke Komm.-Ges., chlorination products of caoutchouc, (P.), B., 963.
- Thurman, B. H. See Clayton, B.
- Thurman, G. S., Romie, K. T., and Fireproof Wall Co., plastic composition for manufacture of conduits and other articles of manufacture by extrusion, (P.), B., 853.
- Thurmond, G. I., and Amer. Enka Corp., desulphurisation of rayon, (P.), B., 897.
- Thurston, L. M., and Barnhart, J. L., relation of materials absorbed on fat globules to richness of flavour of milk and certain milk products, B., 570.
- Brown, W. C., and Dustman, R. B., oxidised flavour in milk. I. Probable relation of lecithin to the flavour, B., 873.
- Thurston, W. R., brake dressing, (P.), B., 788.
- Tiagnui-Riadno, M. G., ammonification in soils and *B. mycoides*, B., 687.
- Tiba, K. See Fujise, S.
- Tibbitts, G. C., Seavey, F. R., and Western Cartridge Co., propellant powders, (P.), B., 479.
- Tice, L. F., the hand homogeniser and its use for extemporaneous preparation of pharmaceutical emulsions, B., 653.
- Tichauer, H., coating of objects made of or covered with zinc, (P.), B., 157.
- Tichonov, K. See Rogovin, S.
- Tichonov, M., effect of flotation reagents on charge of suspensions of mineral particles, A., 1201.
- Tichonov, N. S. See Ignatiuk-Majstrenko, V. A.
- Tichvinskaja, E. I. See Iljin, N. V.
- Tiddens, B. A., root rot of *Primula obconica* caused by *Thielaviopsis basicola*, Ferraris, B., 247.
- Tide Water Oil Co. See Churchill, L. R., Ellsberg, E., and Rembert, E. W.
- Tideswell, F. V., silicosis and anthracotic lungs, A., 1527.
- Tidmore, J. W. See Jacob, K. D.
- Tidmus, J. S. See Dunlop Rubber Co.
- Tidwell, H. C. See Holt, L. E., jun.
- Tiedcke, C., accurate micro-analysis by Pregl's method, A., 315. Apparatus for determination of mol. wt. by the camphor method, A., 1476.
- Tiede, E., Lenard phosphors in theory and practice, A., 429.
[with Knoblauch, H.], chemical reactions with active nitrogen, A., 1213.
- and Chomse, H., copper content of teeth, A., 234. Luminescence of teeth, A., 234. Monocalcium phosphate as basis of organophosphors, A., 312.
- and Knoblauch, H. G., chemical reactions with active nitrogen (formation of mercurous nitride, gallium nitride, and reactions with amalgams), A., 945.
- Tiedebel, W. See Orékhov, A.
- Tiegs, O. W., function of sympathetic nerves in relation to skeletal muscle; evidence for humoral action, A., 116. Cardiac depressor (acetylcholine?) released by dorsal nerve-root stimulation, A., 396.
- Tielsch, A. See Endell, K.
- Tielsch, H., absorption of cosmic rays by different substances, A., 143.
- Tien, Y. L. See Chi, Y. F., and Chuang, C. K.
- Tieszen, D. V. See Ekeley, J. B.
- Tietig, C., apparatus for decolorising and filtering liquids, (P.), B., 84. Decolorisation of mineral oil, (P.), B., 712.
- Tiffany, J. E. See Munroe, C. E.
- Tiffeneau, M., and Broun, D., influence of hydrogen- and hydroxyl-ion concentration on intestinal tonus, A., 244. Microdetermination of ethyl, propyl, and isopropyl bromides in tissues of animals anaesthetised by these substances, A., 1275. Influence of hydrogen and hydroxyl ions on anaesthetic action of propyl bromide on sticklebacks, A., 1275. Opposite effects of hydrogen and hydroxyl ions on pharmacodynamical actions in the autonomic system; action on uterine tonus, A., 1276.
- and Tchoubar, (Mlle.) B., vinyl and hydrobenzoin dehydration of cyclic α -glycols; extension of the hydrobenzoin type of migration to the cyclic series, A., 340.
- and Weill, P., dehydration of the hydrobenzoin of α -phenyl- β -vinylethylene glycol; formation of α -phenylcrotonaldehyde, A., 750.

- Tiffeneau, M., Weill, P., Gutmann, J., and Tchoubar, (Mlle.) B., molecular transpositions in cyclic hydrocarbon series, A., 1240.
- Tift, T. de C., cracking of hydrocarbons, (P.), B., 663.
See also Herthel, E. C.
- Tigges, A. J. See Standard Oil Development Co.
- Tihon, L., *Entandrophragma palustris*, Stancer, A., 267. Native fermented beverages, B., 695.
- Tijmstra, S., and Shell Petroleum Corp., refining of petroleum, (P.), B., 486.
See also Shell Development Co.
- Tikka, J., fermentation of glucose by *B. coli*, A., 1282.
- Tilden, E. B., complement titre of blood in allergic conditions, A., 1396.
- Tilden, R. W. See Winston, J. R.
- Tilford, P. E., use of quinhedrone and antimony electrodes for determining the p_H of solid culture media, A., 1043. Potato spraying, B., 246.
- Tilitschenko, M. N. See Tschelincev, V. V.
- Tiller, L. W., iodine-starch reaction as test for maturity of apples, B., 38.
- Tillet, W. S., fibrinolytic activity of hemolytic streptococci in relation to source of strains and to cultural reactions, A., 664.
- Tilley, C. E., rôle of kyanite in the "hornfels zone" of the Carn Chuinnceag granite (Ross-shire), A., 956.
- Tilley, F. W. See Schaffer, J. M.
- Tilley, J. N. See Handforth, S. L.
- Tilli, P., larvæ control [in water] through calcium cyanamide, B., 384.
- Tillman, J. R., one-dimensional electron diffraction, A., 434.
and Moon, P. B., selective absorption of slow neutrons, A., 1049.
See also Moon, P. B.
- Tilt, J., and Walters, C. F., basal metabolism and diet of normal young college women in Florida, A., 651.
- Tilton, L. W., standard conditions for precise prism refractometry, A., 1097.
and Taylor, J. K., refractive index and dispersion of normal and heavy water, A., 13.
- Timis, G. See Steopoe, A.
- Timken-Detroit Axle Co. See Barber, G. E.
- Timkovski, V. P. See Malinovski, A. E., and Rossichin, V.
- Timm, B., and Mecke, R., Raman effects of organic molecules (vibration structure of acetylenes), A., 681.
- Timm, J. A., kinetic-molecular theory and its relation to heat phenomena, A., 437. Acetanilidoalkylbarbituric acids [alkyl-5-barbiturylacetanilides], A., 1507.
- Timm, O. K. See Olmsted, W. H.
- Timm, W. B., investigations in ore dressing and metallurgy, B., 996.
- Timmermans, J., theory of concentrated solutions. XII. Application of thermal analysis to determination of heats of fusion of organic compounds, A., 304. Stoichiometry. I. Heat of fusion of organic compounds, A., 436.
and Delfet, L., variation of the f.p. of heavy water as a function of pressure, A., 815.
and Poppe, G., mutual solubility of heavy water and organic liquids, A., 1314. Mutual solubility of heavy water and organic liquids in systems with a negative saturation curve, A., 1457.
- Timmis, G. M. See Smith, Sydney.
- Timms, A. G., and Withey, N. H., temperature effects on compressive strength of concrete, B., 547.
- Timms, H. See Simmons, W. H.
- Timofeev, L. I. See Popov, N. F.
- Timoieeva, A. G. See Butkevitch, V. S.
- Timokhin, A. A. See Biryukov, N. D., and Stepanov, L. V.
- Timon-David, J., and Gouzon, B., biochemistry of aphides of the terebinth, A., 1523.
- Timonin, M. I., micro-organisms in profiles of certain virgin soils in Manitoba, B., 964.
- Timson, G. H. See Swanson, P. P.
- Tincker, M. A. H., popular weed killers, B., 247.
See also Darbishire, F. V.
- Tinel, J., and Ungar, G., vasodilatation and local liberation of histamine-like substances, A., 651.
Ungar, G., and Grossiord, A., liberation of histamine-like substances in experimental cerebral embolism, A., 1009.
Ungar, G., and Zerling, M. R., liberation of histamine-like substances in states of shock, A., 651.
- Ting, H. H., and McCabe, W. L., solubility of magnesium sulphate heptahydrate, A., 25. Supersaturation and crystal formation in seeded solutions, A., 26.
- Tingey, D. C., comparative cost and effectiveness of tillage and of chlorates in controlling morning glory, Canada thistle, and perennial saw thistle, B., 167.
- Tingle, A., qualitative reaction for detection of lignone sulphonates (sulphite waste liquor), B., 350.
- Tingwaldt, C., preparation of light pencils and ovens from Nernst oxides, A., 1340.
- Tinker, J. M. See Du Pont de Nemours & Co., E. I.
- Tinsley, J. S. See Hercules Powder Co.
- Tinsley, S. G. See Parkes, G. D.
- Tipson, R. S. See Levene, P. A.
- Tiraferri, L. R. See Straw Fibres, Ltd.
- Tiraspolsky, W., comparison of crude oil analyses, B., 391.
- Tirol, R. H., comparative feeding value of coarse and standard rice bran for growing pigs, B., 827.
- Tischtschenko, D. V., Gutner, R., Faerman, S., and Schtschigelskaja, M., hydrolysis of chlorobenzene in the vapour phase, B., 938.
and Tschurbakov, A. M., catalytic hydrolysis of chlorobenzene by steam, B., 137.
- Tischtschenko, V. E., Ignatovich, M. I., and Krugliakova, K. G., production of artificial cryolite for electric smelting of aluminium, B., 354.
and Koschkin, N. V., action of sodiomalonic ester on diphenylthiocarbamide and carbodiphenylimide, A., 205. Determination of furfuraldehyde by means of diphenylthiobarbituric acid, A., 370.
and Levina, T. A., aluminium fluoride, B., 354.
- Tischtschenko, V. V. See Orlov, N. A.
- Tisdale, E. S., and Lyon, E. W., acid mine-drainage control on upper Ohio river tributaries, B., 1072.
- Tisdale, W. H. See Du Pont de Nemours & Co., E. I.
- Tisdall, F. F. See Agnew, M. C., and Drake, T. G. H.
- Tishina, A. See Proskuriakov, N.
- Tishler, M. See Kohler, E. P.
- Titan Co., Inc., titanium pigments, (P.), B., 161. Titanium compounds or pigments, (P.), B., 226. Barium sulphate and composite titanium pigments containing it, (P.), B., 543. Titanium pigments [zinc orthotitanate], (P.), B., 562. [Hydrolysis of] titanium [sulphate] compounds, (P.), B., 673.
- Titanges, m.b.H., titanium pigments, (P.), B., 1103.
- Titani, T., and Harada, Masao, isotopic fractionation of water due to evaporation and distillation, A., 458. Concentration of heavy isotopes in carbohydrates, A., 944, 1212.
See also Harada, Masao, Itoh, M., Morita, N., Okabe, K., and Yamasaki, S.
- Titanium Alloy Manufacturing Co. See Comstock, G. F., and Kinzie, C. J.
- Titanium Pigment Co., Inc. See Cauwenberg, W. J.
- Titeica, R., absorption spectra of alkali dichromates, A., 805.
- Titeica, S., variation of the resistance of metals in a magnetic field, A., 435.
- Titman, H. See Payman, W.
- Titov, A. A. See Rabinovitch, A. J.
- Titov, N. D. See Tretyakov, V. I.
- Titova, J. G., determination of sulphuric acid in presence of copper salts, A., 316. Electrolytic production of copper from Naukat ore, B., 807.
- Tittler, R. P., and Sandholzer, L. A., fermentation of α -methylglucoside by bacteria, A., 1169. *Escherichia-Aërobacter* intermediates. I. Cultural characteristics, A., 1169.
- Titus, H. W., and Nestler, R. B., effect of vitamin-D on production and properties of eggs, A., 1287.
See also Burrows, W. H., Byerly, T. C., and De Vaney, G. M.
- Titus, N. E., treatment of photographic films, (P.), B., 526.
- Tiukov, D. M., and Babicheva, O. A., value of Winkler method in determining albuminoid ammonia in drinking water, B., 384.
- Tiulin, A. T., peptisation analysis of soil colloids, A., 445. Critical zones of adsorbed ions [in soils] and their availability, B., 1107.
- Tiuljukov, A., and Chrenova, M., elimination of hydrogen sulphide from gases by means of activated charcoal, B., 708.
- Tiurin, I. V., studying biological aspect of soil-organic matter, B., 36. Determination of carbon in soils and their aqueous extracts, B., 1108.
and Kononova, M. M., determination of nitrogen requirement of soils, B., 36.
- Tives, T. H., impurities in fine ceramic masses, B., 1143. Drying of fine ceramic materials, B., 1143.
- Tixier, G., and Beck, Jean, assay of preparations of lactic acid bacteria, A., 898.
- Tjabbes, B. T., resinous deposits from illuminating gas, B., 979.
- Tjashelova, T. P. See Dumanski, A. V.
- Tjia, H. A. See Terres, E.
- Tkachenko, K. T. See Malinovski, A. E.
- Tkatschev, A. D. See Horovitz-Vlassova, L. M.
- To, S., active constituents of *Podophyllum plectanum*, Hance, A., 1157.
- Tobacco By-Products & Chemical Corporation, recovery of nicotine from tobacco material, (P.), B., 430.
See also Headlee, T. J.
- Tobiank, M. See Riesenfeld, E. H.

- Tobie, W. C., pigment of *Bacillus violaceus*. I. Production, extraction, and purification of violacein, A., 899.
- Tobin, C. E. See Gaunt, R.
- Tobin, (Miss) E. See Reimer, (Miss) M.
- Toby, E. M., petroleum thinners, B., 109.
- Tocco, L., toxicity of aluminium. I. Slight cumulative poisoning by ingestion of food prepared in aluminium cooking-vessels, A., 1160.
and Bruno, S., avitaminosis; toxic substance extracted from polished rice, A., 1175.
- Tocher, J. F., proportions of certain poisonous substances in feeding-stuffs and their effect on livestock, B., 522.
- Toezyski, T. See Franke, M.
- Tod, H., effect of hypnotics on glucose tolerance, A., 655.
See also Jones, M. S.
- Toda, H. See Kosaka, Y.
- Todd, A. R. See Barger, G.
- Todd, H. R. See Tarvin, D.
- Todd, J. See Russell, A.
- Todd, J. D., Silverman, M., and Sherwin-Williams Co., dispersion of pigments, (P.), B., 1103.
- Todd, T. W. See Vénar, Y.
- Todes, O. See Frenkel, J.
- Todhunter, E. N. See Sherman, H. C.
- Todorović, K. N., and Mitrović, V. M., determination of chromium, aluminium, and iron, and complete analysis of chromites, A., 838.
- Todorovitch, K., action of gastric juice on typhoid bacilli, A., 1030.
- Tödt, F., use of colour indicators for measurement of p_H of strongly coloured and viscous substances, A., 591.
Determination of conductivity of solutions of any salt content, A., 723.
Behaviour of sodium sulphite in cathodic discharge of hydrogen ions, A., 831.
Significance of physico-chemical research in the sugar industry, B., 1015.
See also Spengler, O.
- Toennies, G., and Elliott, M., precipitation of *L*-, *DL*-, and *m*-cystine by phospho-12-tungstic acid, A., 1356.
See also Nussle, W., jun.
- Tönsberg, E., and Götz, F. W. P., ozone in the Arctic night, A., 912.
See also Vegard, L.
- Töpelmann, H., and Schuhknecht, W., spectroscopic analysis of vitamin-D in wool-fat, A., 793.
- Toepfer, D., blood-iodine in rickets, A., 518.
- Törnblom, N., oxygen consumption of rats in *A*-avitaminosis and when fed with carotene, A., 1427.
- Török, G., and Neufeld, L., increasing chlorine content of young dogs, A., 115.
Chlorine content of capillary and venous whole blood and serum in infancy, A., 509.
Ascorbic acid and blood-catalase. I. and II., A., 546, 1535.
Sex hormones and chlorine economy, A., 667.
Hormonal regulation of chlorine in children, A., 1283.
- Tofaute, W., detection of faulty welds by X-rays and their effect on the mechanical properties [of steels], B., 310.
- Sponheuer, A., and Bennek, H., transformation, hardening, and tempering processes in steels with 1% of carbon and up to 12% of chromium, B., 727.
- Tofaute, W. See also Schafmeister, P.
- Toffoli, C., action of acetylsalicyl chloride on magnesiylindoles. II., A., 1379.
- Toivonen, N. J., methylsantene compounds derived from fenchyl alcohol, A., 755.
- Tokarski, H., hydroclastic elements of the Czeremosz district, A., 956.
- Tokarski, J., manganese ores discovered at the sources of the Czeremosz [S.E. Poland], B., 153.
- Tokmanov, V. E., Fergana crude oil, B., 1029.
and Rodzaevskaja, V. D., Baikal ozokerite, B., 1029.
- Toko, U., purification of wool fat, B., 1002.
- Tokunaga, M. See Honda, K.
- Tokuoka, M., synthesis of carbamide from carbon dioxide and ammonia. I. and III., A., 966, 1357.
Polarographic studies with the dropping mercury cathode. LII. Electro-reduction of benzaldehyde, A., 1462.
and Morooka, H., physico-chemical properties of carbamide nitrate, A., 291.
- Tolansky, S., nuclear spin of iodine, A., 137.
Distribution of nuclear mechanical moments, A., 676.
and Heard, J. P., intensity measurements in a fine structure multiplet of As II, A., 2.
- Tolbert, L. A. See MacLeod, F. L.
- Toledo, H. A. M., dehydration of copper sulphate contaminated with organic materials, (P.), B., 991.
- Tolkachev, D. See Berkman, Y. P.
- Tollert, H., mixture rule for viscosity of aqueous solutions of strong electrolytes, empirical determination of specific ionic viscosities and repression of hydrolysis by a neutral salt, A., 443.
- Tolman, C., and Goldich, S. S., granite, pegmatite, and replacement veins in the Sheahan Quarry, Graniteville, Missouri, A., 842.
- Tolman, C. P., and Columbia Appliance Corp., reclaiming or distilling apparatus, (P.), B., 883.
and Nobel & Wood Machine Co., colloid mill, (P.), B., 1074.
- Tolman, L. M., and Goranflo, S., continuous distillation of fatty acids, B., 462.
- Tolman, R. C. See Waddington, G.
- Tolmatschev, J. M., spectral analysis of Magnitogorsk pig iron and slag, B., 1046.
and Filippov, A. N., presence of rare alkaline metals in amazonites, A., 727.
- Tolmatschev, N. C., biochemistry of blood in scurvy, A., 518.
- Tolstoi, D. M., viscosity and plasticity of disperse systems. VII. Investigation of plastic flow, A., 1318.
See also Volarovitch, M. P.
- Tolstopiatov, V. M. [with Riskaltschuk, A. T.], mixed magnesium alcoholates, and their molecular compounds. III. Existence of equilibrium systems in ethereal solutions of magnesium alcoholate iodides, A., 978.
[with Sverdlova, B. N.], mixed magnesium alcoholates, and their molecular compounds. II. Molecular compounds formed from magnesium alcoholate iodides, aldehydes, and certain diketones, A., 978.
- Tomasik, Z., chlorination of methane, B., 137.
See also Łachociński, Z.
- Tombour, F., and De Clerck, J., comparison of Belgian and foreign hops, B., 1015.
- Tombouliau, R. L. See Daggs, R. G.
- Tomesik, J., and Szongott, H., specific polysaccharide of anthrax bacillus, A., 126.
- Tomey, L. F. See Guerrant, N. B.
- Tomiček, O., and Freiburger, F., volumetric determinations in strongly alkaline solutions. I. Titration of cobalt with ferricyanide, A., 838.
and Kalný, J., volumetric determinations in strongly alkaline solutions. II. Titration of manganese with ferricyanide, A., 1094.
and Přibil, R., mercuric cyanide and mercuric oxycyanide electrodes, A., 450.
- Tominaga, K., relations between action of extract of human tonsils and those of poisons for vegetative nerves or hormones, A., 668.
- Tomioaka, S. See Ogata, A.
- Tomita, M., and Nakashima, M., preparation of γ -chloro- β -hydroxybutyric acid and $\alpha\delta$ -dipthalimido- γ -hydroxyvaleric acid, A., 606.
- Tomita, T., variations in optical properties with chemical composition in the monoclinic pyroxenes, A., 1101.
- Tomiyama, S. See Takei, Toshio.
- Tomiyama, T., proteins of foods. IV. Digestibility by proteolytic enzyme from viscera of eel, A., 1163.
Apparent dissociation constants of canavanine and canaline, A., 1321.
Reaction between amino-acids and formaldehyde, A., 1356.
and Shigematsu, S., determination of tryptophan, A., 877.
- Tomkeieff, S. I., differentiation in basalt lava, Island Mageo, Co. Antrim, A., 725.
and Marshall, C. E., Mourne Dyke-Swarm, A., 1102.
- Tomkins, R. G., iodised wraps for prevention of rotting of fruit, B., 204.
- Tomlinson, G. H., bleaching pulp and other lignified materials, (P.), B., 668.
- Tomlinson, (Miss) M. L., preparation of 4-methylthiazole-5-carboxylic acid, A., 1135.
See also Plant, S. G. P., and Robinson, R.
- Tommasi, G., improvement of the Agro Pontino. I. Types of soil and their possibilities. II. Agrarian tests for the evaluation of the improved soil, B., 71, 1060.
Improvement of soils by chemical manuring, B., 324.
Winter manuring of wheat with nitrogen, B., 373.
Manuring of newly cultivated soils. I. General, B., 515.
Nitrogen manuring, B., 1060.
Manuring of soils for improvement, B., 1060.
- Doimi, S., and Marimpietri, L., liming of soils. I. Improvement of acid humus soils, B., 965.
and Marimpietri, L., oxidation-reduction potential (r_H) of soils, B., 71.
Determination of the phosphate requirement of soils, B., 515.
- Tommila, E., anodic reactions during electrolysis of α -hydroxy-acids, A., 960.
- Tomonaga, S. See Nishina, Y.

- Tomonari, T.**, mechanism of nitration and properties of cellulose nitrate. V. Denitration of cellulose nitrate. VI. Reaction mechanism of diminished nitration. VII. Action of nitric acid-sulphuric acid-water mixtures on cellulose and cellulose nitrate. VIII. Classification of cellulose nitrate preparations with respect to the mixed character of the micelle. IX. Formation of cellulose trinitrate II and of cellulose dinitrate I. X. and XI. Nitration of cellulose fibres and denitration of trinitrated fibres with dilute nitric acid-sulphuric acid mixture. XII. Formation of intermediate compounds. XIII. Formation of unstable foreign substances, B., 265, 540, 896. Solubility and viscosity of cellulose nitrate, B., 764.
- Tomori, N.** See Kőszegi, D.
- Tomba, H.** See Halla, F.
- Tompkins, D. H.**, and Rubber Service Labs. Co., reaction products of sulphur dioxide and aldehyde derivatives of a Schiff's base, (P.), B., 761. [Inhibitor for] metal pickling, (P.), B., 907.
- Tompos, A.**, sugar content of pods of paprika plant types, A., 1435.
- Tompsett, S. L.**, excretion of copper in urine and faeces and its relation to copper content of the diet, A., 235. Copper and "inorganic" iron contents of human tissues, A., 377.
- and **Anderson, A. B.**, lead content of human tissues and excreta, A., 1160.
- Tomsicek, W. J.** See Kolthoff, I. M.
- Tomula, E. S.**, improvement of baking quality of indigenous wheats by use of chemicals, B., 377.
- Tonamy, C. H.**, high-tin bronze, B., 996.
- Tone, A.**, gypsum, B., 451.
- Tonegutti, M.**, Taliani stability test applied to nitrocellulose, B., 288. Stability of certain detonant explosives to heat, B., 1119.
- Tongberg, C. O.**, Quiggle, D., and Fenske, M. R., efficient small-scale fractionating equipment, A., 59.
- See also **Fenske, M. R.**, and Quiggle, D.
- Tongeren, W. van**, determination of alkalis by Lawrence Smith's method, A., 596. Recent development of geochemistry, A., 840. Chemical analyses of minerals from Poeloe Berhala, A., 1100.
- Toni, G.**, and Farini, P., *Adonis vernalis* and methods of extraction of the active principles, B., 573.
- Tonks, L.**, momentum of ions leaving a region of ionisation, A., 801.
- Tonn, W.**, wear of iron alloys on emery paper and their hardness, B., 677.
- See also **Bauer, O.**, Bühler, H., and Scheil, E.
- Tonnet, J.** See Loeper, M.
- Tonney, F. O.** See Noble, R. E.
- Tomomura, T.**, and Ishihara, (Miss) Kimi, surface tensions of ethyl alcohol and carbon disulphide at low temperatures, A., 15.
- Toohy, E. A.**, Williams, E. R., and Johnson-Manville Corp., [thermal] insulating material, (P.), B., 578.
- Toole, E. J.** See Andreadis, T. B.
- Toop, H.** See Heilmeyer, L.
- Topley, B.**, and Smith, M. L., catalysis of an interface reaction by adsorbed molecules, A., 42. Kinetics of salt-hydrate dissociations: $\text{MnCl}_2 \cdot 4\text{H}_2\text{O} = \text{MnCl}_2 + 2\text{H}_2\text{O}$, A., 588.
- See also **Hughes, E. D.**, Juliusburger, F., and Teller, E.
- Toptschijev, K. S.**, action of carbon disulphide on methylpyridone-imide, A., 995.
- Torday, A.**, decrease in sodium chloride content of blood after vomiting, A., 1010.
- Tore, D.** See Artom, C., and Cioglia, L.
- Torigian, J.**, and Drug Products Co., Inc., colloidal manganese solutions [for therapeutic use], (P.), B., 381.
- Torii, T.** See Shibuya, K.
- Tormo, J.**, normal composition of [Peruvian] wines, B., 695.
- Torno, H.** See Krause, Alfons.
- Toropov, N. A.**, chemical-mineralogical investigations of barium aluminate, A., 602.
- Torporec, A.** See Arzibischev, S. A.
- Torres, C.**, and Brosa, S., reaction between chloral hydrate and phenylhydrazine, A., 969.
- Torres, I.**, resting respiration of mammalian tissue in hydrogen cyanide, A., 1405.
- and **Ruiz, A. S.**, determination of blood-sodium, A., 509.
- See also **Collazo, J. A.**
- Torrey, G. G.** See Booth, H. S.
- Torrey, J. P.**, Thorpe, F., jun., and Graham, Robert, pathological changes encountered in wild ducks, A., 1021.
- Torrisi, D.**, micro-determination of different fractions of phosphorus and lipins in milk, A., 512.
- See also **Clementi, A.**
- Torsuev, V.**, increasing water-resistance of casein pigments [on leather] by means of chrome alum, B., 864. Determination of ammonium salts, B., 1043.
- Torulf, H. G.**, and Zettergren, B., machine for effecting kneading, crushing, mixing, and similar operations, (P.), B., 386.
- Tosawa, Y.** See Koike, M.
- Tosterud, M.** See Aluminum Co. of America.
- Tóth, E.**, rôle of the corpus luteum in the uterine activity of the rabbit, A., 666.
- Tóth, G.** See Zechmeister, L.
- Totman, F. B.**, Morris, L. P., and Kuhrt, G. J., jun., mixer, (P.), B., 3.
- Totoiescu, D.**, behaviour of aqueous ammonium sulphide towards manganous ions, A., 186.
- Tottingham, W. E.**, Kertesz, Z. I., Loomis, W. E., and Phillips, T. G., chemical analysis of plant tissue, A., 1435. Determination of carbohydrates, A., 1435. Determination of nitrogen in relatively simple compounds, A., 1435.
- and **Lease, E. J.**, photochemical aspect of nitrate assimilation in plants, A., 552.
- Totzek, F.**, coal-distillation ovens, etc., (P.), B., 180.
- See also **Koppers Co. of Delaware.**
- Touceda, E. G.**, and Consolidated Car Heating Co., Inc., composition of matter [chromium-cobalt alloy], (P.), B., 908.
- Tougarinov, B.**, titration of oximes of nickel and copper, A., 187.
- See also **Michiels, L.**
- Toulouse, J. H.**, bottling of carbonated fruit-juice beverages, B., 251.
- Tour, S.**, and Pitkin, Inc., L., copper-base alloy, (P.), B., 857.
- Tourneur, C.**, action of alcohol on gum arabic sols studied by the polarisation of diffuse light, A., 821.
- Toussaint, G.**, Détrie, J., and Vérain, M., influence of p_{H} on dissociation of hexamethylenetetramine and hydriodide of hexamethylenetetramine-ethanol, A., 34.
- Toussaint, J. A.**, and Wenzke, H. H., dielectric properties of acetylenic compounds. V. Acetylenic halides and alcohols, A., 683.
- Toussaint, W. J.** See Carbide & Carbon Chem. Corp.
- Toval, M. T.**, and Moles, E., vapour-pressure curve of nitrobenzene, A., 438.
- Tovborg-Jensen, S.** See Kristeussen, M. K.
- Toverud, G.** See Toverud, K. U.
- Toverud, K. U.**, and Toverud, G., chemical and histological studies of bones and teeth of new-born infants, A., 882.
- Tower, E. B. H., jun.** See Vogel, F. A.
- Towne, C. C.** See Texas Co.
- Towne, R. L.**, air-conditioning in the [lacquer] finishing room, B., 1103.
- Townsend, (Miss) A.**, change in thermal energy which accompanies a change in magnetisation of nickel, A., 572.
- Townsend, H. B.**, application of rubber to paper fibres, B., 143.
- See also **Vultex Corp. of America.**
- Townsend, J. S. E.**, theories of ionisation, A., 1047.
- Townsend, L. E.**, importance of the surface to which paint is to be applied, B., 365.
- Townshend, A. S.** See McRae, J. A.
- Toxopéus, M. A. B.**, differentiation of chloride and bromide by the kidney, A., 1007. Influence of thyroid and pituitary glands on chloride distribution, A., 1021.
- Toyama, J.**, xanthine-oxidase, A., 401.
- Toyama, Y.**, a normal paraffin as a minor constituent in hydrogenated sardine oil, A., 1144.
- and **Tsuchiya, T.**, products of partial bromination of linoleic and linolenic acids, A., 473. Iodine values of linolenic, linoleic, and stearolic acids by the Wijs and Rosenmund-Kühnemann methods, A., 473. Dithiocyanate of linoleic acid and tetrathiocyanate of linolenic acid, A., 473. Stereoisomeride of eleostearic acid in pomegranate seed oil, A., 960. Stereoisomeride of oleostearic acid in the seed oil of karasu-uri, *Trichosanthes cucurbitoides*, A., 960. Highly unsaturated acids in sardine oil. II. Constitution of hiragonic acid, $\text{C}_{18}\text{H}_{26}\text{O}_2$. III. Isolation and constitution of moroctic acid, $\text{C}_{18}\text{H}_{28}\text{O}_2$. IV. Separation of highly unsaturated C_{20} -acids. V. Constitution of eicosatetraenoic acid. VI. Constitution of eicosapentaenoic acid. VII. Separation of highly unsaturated C_{22} -acids. VIII. Constitution of clupanodonic acid, A., 960, 1105, 1223, 1482. Occurrence of a saturated hydrocarbon, pristane, in sardine, herring, and sperm oils, A., 1397.
- Toyoda, H.**, and Kishi, S., micro-determination of total sulphur in biological substances, A., 1552.
- Tozawa, Y.**, pharmacological action of phenaceturic acid. II, A., 1020.
- Trabaud, L.**, terpeneless orange oil from French Guinea, B., 45.
- Track, L. K.**, cake-baking method for testing soft wheat flours; standardisation of cream of tartar, B., 651.
- Trageser, G.** See Schwarz, R.
- Traill, D.**, others of cellulose, B., 57.
- See also **Imperial Chem. Industries.**
- Tramm, H.**, and Velde, H., spontaneous decomposition of ammonium nitrate melts, A., 50.
- Tranent, R. C.**, metals in the food industry, B., 554.

- Tranin, S., and Snyder, R. M., treatment of solid food products, (P.), B., 827.
- Trannoy, R. See Lepape, A.
- Transparent Paper, Ltd., Morcom, R. K., Hallam, H., and Pellatt, D. L., flexible, transparent, translucent, or opaque liquid- and moisture-proof material, such as wrapping foil, (P.), B., 562.
- Wolf & Co., Schulz, H. I., and Appel, J., protective cellulose hydrate foil, (P.), B., 944.
- Trapeznikov, A. K. See Kosolapov, G. F.
- Trapeznikova, O. N., and Schubnikov, L. V., equilibrium for gaseous and liquid phases of oxygen-nitrogen mixtures, A., 695. Anomaly of specific heat of anhydrous chromium trichloride, A., 1198. Anomaly in specific heat of anhydrous ferrous chloride, A., 1198.
- Traquair, J., and Mead Res. Eng. Co., paper manufacture, (P.), B., 352.
- Traube, I., critical state and the theory of continuity, A., 574. Theories of narcosis, A., 1275.
- Traube, W., and Härtling, H. [with Seufner, V., and Kell, S.], silk fibroin, A., 1146.
- and Stumpf, K. E., preparation of colloidal ferric hydroxide solutions with the aid of tetra-alkylammonium hydroxides containing several vicinal hydroxyl groups in one alkyl residue, A., 1073. Theory of alkaline copper solutions and of the biuret reaction. II., A., 1110.
- Traubenberg, H. R. von, and Bartels, H., artificial activation of lead by γ -rays, A., 7.
- See also Eckardt, A.
- Trautdt, W. F., apparatus for washing or treating [pulpy] materials, (P.), B., 930.
- Trautmann, A., influence of phosphatide-rich rations on the animal organism; resorption of phosphatides, A., 523.
- Trautmann, S., and Ambard, L., rate of hydrolysis of sucrose and the acidity and viscosity of the medium, A., 587.
- Trautz, M., and Ehrmann, K., sulphur. II. Sulphur fluorides and oxyfluorides, A., 460.
- and Fröschel, E., variation of viscosity of paramagnetic gases in a magnetic field, A., 575.
- and Müller, Walter, viscosity, thermal conductivity, and diffusion in gas mixtures. XXXI. Definition and corrections of diffusion constants of gases. XXXII. Vaporisation process for determination of diffusion constants. XXXIII. Correction of diffusion constants. XXXIV. New determinations of diffusion constants, and final summary, A., 575.
- and Reichle, A., electrical differential method for measurement of G_p for gases. VI. Specific heats of argon and air, A., 690.
- and Zimmermann, H., viscosity, thermal conductivity, and diffusion of gas mixtures. XXX. Viscosity at low temperatures of hydrogen, helium, and neon, and binary mixtures of them down to 90° absolute, A., 438.
- Trautzel, K., detonation velocity of dynamites, B., 703.
- Travassos, J., antigenic power and properties of staphylococcus anatoxin, A., 256.
- Travatex Products Corporation. See Snell, F. D.
- Travers, A., adsorption; silica gel and its applications, A., 27. Colorimetric determination of silicon in cast iron, B., 358. Determination of chromium in cast iron and special steels, B., 359. Determination of vanadium in cast iron and special steels, B., 359. Colorimetric determination of molybdenum in steels in presence of other elements, B., 360. Volumetric determination of vanadium in iron and special steels, B., 594. Constitution of Portland cement, B., 675.
- and Aubert, J., qualitative tests on the differential-aeration couple and passivation of iron, B., 26.
- Travers, M. W., thermal decomposition of acetaldehyde, A., 708. Ramsay and helium, A., 724. Pyrolysis of hydrocarbons considered from the viewpoint of classical organic chemistry, chemical thermodynamics, and chemical kinetics, B., 391.
- and Pearce, T. J. P., mechanism of formation of methane and condensation products by pyrolysis of ethane, ethylene, etc., A., 40.
- Travis, S. J. See Trunsky, P.
- Trawick, M. W., spectrum of molybdenum v, A., 1183.
- Traxler, R. N., and Huntzicker, H. N., influence of the presence of a solute on rate of osmosis, A., 699.
- Treadwell, W. D., polymerisation phenomena of silicic acid, A., 296.
- and Beeli, C., valency chemistry of the phosphorus sulphides, A., 1327. Electroscopic detection of yellow phosphorus in presence of tetraphosphorus trisulphide, A., 1337.
- and Terebesi, L., electrometallurgy of aluminium, A., 45. Determination of free energy and heat of formation of aluminium chloride from the potential of the chlorine-aluminium cell, A., 304.
- and Wettstein, E., formation of complexes of ferric ion with carboxylic acids, A., 461. Titration of organic acids with ferric chloride, A., 1140.
- See also Weber, J., and Zürzer, T.
- Treanor, E. E. See Norquist, V. C.
- Treblar, H. A. See Conn, L. W., and Hanovia Chem. & Manufg. Co.
- Treff, W., and Werner, H., synthesis of jasmone, A., 750.
- Trefiliev, I. A., and Buschman, K. A., hydrogenation of peat tar, B., 933.
- Fratkin, R. L., and Buschman, K. A., hydrogenation of maxorochni [*Nicotiana rustica* tobacco] dust and resin, B., 1118.
- Trehin, R., absorption spectra of aqueous solutions of hydrochloric acid and of various chlorides in the ultra-violet, A., 9.
- and Vodar, B., absorption spectrum of liquid hydrogen chloride in the far ultra-violet, A., 805.
- Treibs, A., organic minerals. IV. Chlorophyll and haemin derivatives in rocks, petroleum, coals, and phosphorites, A., 727. Porphyrins in coal, A., 1347.
- and Dinelli, D., constitution of pyrrolinc, A., 868. Pyrrole derivatives with attached isocyclic ring; Bz-tetrahydroindoles and cyclopentenopyrroles, A., 870.
- Treibs, W., autoxidation of $\alpha\beta$ -unsaturated ketones. VIII. Function of peroxides as intermediate products, A., 979. Elucidation of the constitution of sesquiterpenes by powerful oxidative degradation. I. Cedrene and cedrol. II. α -Gurjunene and gurjun-azulene, A., 983, 1376.
- Treichel, J. B., and MacAndrews & Forbes Co., air-foam for fire-extinguishing purposes, (P.), B., 579.
- Trelease, H. M. See Trelease, S. F.
- Trelease, S. F., and Trelease, H. M., changes in pH of culture solutions containing nitrate- and ammonium-nitrogen, A., 1178.
- See also Curry, J.
- Trelles, R. A., determination of alkali reserve, A., 880. Fluorine in drinking water, B., 384.
- Treloar, A. E., and Sullivan, B., determination of moisture in feeds; comparison of three moisture methods, B., 1114.
- Treloar, W. P. See Phoenix Supply Co.
- Trelogan, H. C., and Combs, W. B., fat rising in cream, B., 121. Testing frozen cream, B., 250.
- Tremearne, T. H. See Wiebe, R.
- Tremolada, E. See Cambi, L.
- Tremols, M., comparative values of commercial fertilisers, B., 868.
- Trénel, M., action of "erdstrahlen" on the divining rod. I. and II., A., 600, 1212.
- and Alten, F., physiological significance of mineral acidity in soils, B., 164.
- Trenkler, F., characteristic vibrations of mechanical models of molecules. I. Three mass systems. II. Four-mass systems, A., 432, 918.
- Trenknerówna, M. See Lampe, W.
- Trensz, F., differentiation of flocculation and "superflocculation" in serum of paludism, A., 385. Differentiation of normal and paludic serum-globulin by the serum-flocculation reaction of Henry for paludism, A., 650. Relation between pseudoglobulins and "super-flocculation" of serum in distilled water, A., 776. Effect of saline ions on flocculation and super-flocculation of serum of paludics, A., 1149.
- Trent, E. M. See Andrew, J. H.
- Trepal, L. See Sageras, P. O.
- Tress, G., and Tress, M., modification of the cresyl-violet technique for staining nerve cells, A., 1146.
- Tress, H. J. See Drew, H. D. K.
- Tress, M. See Tress, G.
- Tressler, D. K., and Evers, C. F., technique of determining moisture-vapour transmission through papers and boards, B., 943.
- and Mathieson Alkali Works, Inc., wax-like substances, (P.), B., 959.
- See also Labarthe, J., jun.
- Treston, C. J., and Kloister Labs. Corp., calcium hydroxyethylphenylamino-p-sulphonate [β -hydroxyethylsulphanilate], (P.), B., 263.
- Tretolite Co. See De Groote, M., and Roberts, C. H. M.
- Tretyakov, V. I., and Titov, N. D., substitution of nickel for cobalt in pressed hard alloys, B., 105.
- Treuting, H. R., and Amer. Machine & Foundry Co., working of metals, (P.), B., 909.
- Trevorrow, V., and Fashena, G. J., determination of iodine in biological material, A., 1182.

- Trevy, R., acetaldehyde resins, B., 510.
- Treweek, D. N. See Guedel, A. E.
- Triché, H., quantitative spectral analysis, A., 835. Quantitative spectral analysis of calcium and barium in light alloys and solutions, A., 837.
- Trief, V., hydraulic binding materials, (P.), B., 102.
- Trieschmann, H. G., surface tension and solvation, A., 1316.
See also Nordt, E., and Wolf, K. L.
- Trillat, J. J., electron diffraction and its application to study of organic compounds, A., 191.
and Matricon, M., permeability of cellophane films to dry or moist air, A., 578.
and Motz, H., errors of interpretation in electronic diagrams of organic substances, A., 813. Formation and structure of uni- and bi-molecular layers of oily substances on metallic surfaces, A., 820. Molecular layers of fatty substances on metals, A., 1308. Diffraction of electrons by metals and organic polymerides, A., 1452.
and Paic, Miloslav, annealing of pure aluminium, B., 553.
See also Calvet, J., and Mark, H.
- Trimbach, H., effect of ingestion of alkali on ketone excretion during inanition, A., 891. Ketogenesis during fasting, A., 891. Urinary excretion of ketones and ammonia in minimum endogenous protein metabolism, A., 891. Effect of diet on ketogenesis, A., 1017.
- Trimble, F. H., casting molybdenum buttons in brass, for water-cooled targets in X-ray tubes, A., 1218.
- Trimble, H. M., ferric chloride for sewage treatment, B., 47.
and Potts, W., glycol-water mixtures; vapour pressure-b.p.-composition relations, A., 290.
- Trion, C. E., and Battelle Memorial Inst., treatment of copper and its alloys [to prevent tarnishing], (P.), B., 106.
- Trione, G., casting of antifriction metallic alloys on ferrous metals, (P.), B., 910.
- Triplex Safety Glass Co., Ltd., Scorah, L. V. D., and Wilson, J., polymerisation of organic compounds, (P.), B., 13, 195. Polymerisation of organic compounds [α -methylacrylonitrile], (P.), B., 93, 263. Laminated glass, (P.), B., 101. Foraminous masses [of glass silica, etc.], (P.), B., 454.
- Tripodi, M., alkali reserve in induced hypoglycaemia in normal and diabetic subjects, A., 1269.
- Trischin, F. I., rapid detection of mercury, A., 318. Rapid determination of mercury, A., 950.
- Triumph Manufacturing Co. See Dell, G. W.
- Trivedi, H., interpretation of spectra of mono- and di-chlorides of tin, A., 913.
- Trobridge, G. W. See Internat. Latex Processes, Ltd.
- Tröger, E., magmatic rocks, A., 322. Content of rare elements in igneous rocks, A., 841.
- Tröskén, O. See Dilthey, W.
- Trofimov, A., mineral iodine in seaweeds, A., 553.
- Trogus, C., and Hess, K., X-ray investigation of cellulose and its derivatives, A., 1308.
See also Hess, K.
- Troitzky, N. D. See Naiman, I. M.
- Trojan Powder Co. See Wyler, J. A.
- Trokhin, I. P. See Katushev, J. M.
- Trolander, E. W., Wilson, W. C., and Pyroxylin Products, Inc., protection of rubber, (P.), B., 738.
- Trombe, F., isolation of gadolinium, A., 456. Metallic gadolinium, A., 711. Paramagnetism of metallic gadolinium above its Curie point, A., 1454.
See also Urbain, G.
- Tromnau, H. W., synthetic spinels coloured with cobalt, A., 714.
- Tromp, F. J., and Schilz, W. E., oxygen content of cyanide solutions, B., 802.
- Tromp, L. A., auxiliary condensing equipment, B., 473. Regenerative evaporation by thermo-compressors [for sugar factories], B., 1063.
- Tronev, V. G. See Ipatiev, V. V.
- Tronov, B. V., and Kulev, L. P., comparison of activity of alcohols and carboxylic acids under various conditions, A., 38. Complexes of aromatic nitro-compounds with acids, A., 1077.
- Tronstad, L., validity of Drude's optical method of investigating transparent films on metals, A., 1310. Colorimetric determination of humus matter in sand for cement, B., 455.
and Flood, H., formation of drops in supersaturated vapour of heavy water, A., 1314.
and Höverstad, T., optical investigation of passivity of metals. II. Natural oxide film on polished iron surfaces, A., 38. Optical observations on effect of ozone and air on metals, A., 41.
Nordhagen, J., and Brun, J., density of 100% heavy water, A., 1313.
- Tropsch, H., and Egloff, G., high-temperature pyrolysis of gaseous paraffin hydrocarbons, B., 1035.
and Mattox, W. J., absorption of ethylene by solid cuprous chloride, A., 957. Determination of gasoline content of gases, B., 54. Pump for delivering liquids at low constant rates, B., 82. Analysis of gaseous hydrocarbons; determination of ethylene, propylene, and butylene, B., 392.
See also Universal Oil Products Co.
- Troschke, G., can ethyl alcohol serve as oxidation material in muscular activity? A., 1409.
- Troschtschenko, A. T. See Voroschcov, N. N., *jun.*
- Trost, F., analysis of pentosans; condensation reactions furfuraldehyde-phloroglucinol, methylfurfuraldehyde-phloroglucinol, and the separation of furfuraldehyde, methylfurfuraldehyde, and hydroxymethylfurfuraldehyde by means of their phloroglucides, A., 769. Brazilian copal, B., 641.
and Doro, B., separation of n -nonacosane from myrrh, A., 1180.
- Troszkiewiczówna, C. See Cybulski, K.
- Trotman, S. R., dermatitis in relation to knitted woollen goods, B., 896.
and Bell, H. S., dyeing of chlorinated wool, B., 353. Use of aqueous solution of bromine for production of unshrinkable finish on knitted woollen goods, B., 353. Determination of damage in silk, B., 540.
- Trout, C. M., Halloran, C. P., and Gould, I., *jun.*, effect of homogenisation on physical and chemical properties of milk, B., 825.
- Trowbridge, M. L., and Brodrex Co., coating of fresh fruit in preparation for the market, (P.), B., 1067.
- Troxell, W. W. See Ober, B.
- Troy, H. C., and Sharp, P. F., detection of lactic acid in milk and cream, B., 475.
- Trtlek, J. See Dubský, J. V.
- Tru-TeX, Ltd., renovating surface and colour of textile materials, (P.), B., 98.
- Tru-Way Manufacturing Co. See Walker, Albert O.
- Trubnick, E. H. See Rudolfs, W.
- Truesdale, E. C., Wilhelm, E. J., and New Jersey Zinc Co., anodic coating of zinc-base metals, (P.), B., 506.
See also New Jersey Zinc Co.
- Truffaut, R., action of some catalytic poisons on hydrogenation of benzene in a liquid medium at room temperature, A., 456. Polymerisation of cyclohexene in presence of phosphoric oxide, A., 480.
- Truffaut, G., [agents for] selective destruction of adventitious plants and improvement of crops, (P.), B., 517.
- Truhaut, R. See Sannié, C.
- Trumbull, H. L., and Goodrich Co., B. F., photographic developer and development, (P.), B., 655. Articles from [rubber] latex, (P.), B., 962.
- Trumpy, B., Raman effect and free rotation, A., 565. Raman spectra of deuterium compounds, A., 806.
See also Sörensen, N. A.
- Trunel, P., permanent electric moments of some alkyl chlorosulphites, A., 430. Electrical moments of isobutyl, isopropyl, and phenyl chlorosulphites, A., 1055.
- Truniger, E., manurial trials with slag phosphato, "triple superphosphate," and dicalcium phosphate, B., 602. Under what conditions should superphosphate be used? B., 1109.
- Trunsky, P., and Travis, S. L., reclamation of fibrous materials, (P.), B., 720.
- Truog, E. See Drosdoff, M., and Mehlich, A.
- Trupp, V. E., changes in vegetables during storage, B., 476.
- Trusov, M. D. See Medinski, C. B.
- Trussov, A. A., and Rodin, S. V., [sodium] sulphate in mechanical production of Bohemian and bottle glass, B., 495.
- Truszkowski, R., and Chajkinówna, Z., influence of viscosity of the medium on velocity of oxidation of uric acid in presence of insoluble uricase, A., 405. Nitrogen metabolism of certain invertebrates, A., 1407.
- Trutnovsky, H., sulphur-free gas for distance transmission, B., 756.
- Try, A. G. L. See Stuart, M.
- Try, H. T. See De la Rivière, R. D.
- Tryon, R. W. See Standard Oil Development Co.
- Trzeński, W., viability of weed seeds in ordinary stall manure and in that treated by the Kranz method, B., 968.
- Trzebski, S. See Broniewski, W.
- Trzesiński, P. See Dziewoński, K.
- Tsai, C., and Yi, C. L., carbohydrate metabolism of the liver. IV. Sugar output in amytilised cats, A., 241.
- Ts'ai, L. S., and Chao, H. L., wooden cores for electric furnaces, B., 858.
and Hsiao, C. J., adsorption of hydrogen chloride by formaldehyde-treated hide powder, B., 281.
and Lo, T. S., adsorption from solution. III. Adsorption of picric acid by silica gel, A., 696.

- Ts'ai, L. S., and Yü, H. A., adsorption from solution. II. Adsorption of styphnic acid by activated sugar charcoal, A., 28.
- Tsatsas, T. See Wieland, H.
- Tschadaeva, L. F. See Sentzov, P. A.
- Tschagovetz, R. V., influence of work and training on oxidation-reduction potential of muscle-tissue, A., 1522.
- and Gerschenovitch, Z. S., electrodes for parallel determination of the oxidation-reduction potential and p_H in biological media, A., 1552.
- Tschailachian, M. C., and Alexandrovskaja, V. A., nature of the photoperiodic effect (induction), and the effect of length of day on activity of [plant] oxidising enzymes, A., 1038.
- Tschakert, H. E. See Hüttig, G. F.
- Tschalij, V. P. See Plotnikov, V. A.
- Tschapek, M. V., hydrophilic colloids. I. Calorimetric investigation of hydration of hydrophilic colloids in ethyl alcohol-water mixture and in ethyl alcohol-ether-water mixture, A., 1075.
- See also Dumanski, A. V.
- Tschapigin, V. F. See Schemjak, F. M.
- Tschebotaev, P. M., recovery of light-middle oil rich in phenols and of high-quality wash oil from tar of high-speed ovens, B., 1080.
- Tschekalin, M. A. See Filippitshev, S. F.
- Tschekan, L. I., influence of solvents on butyl alcohol-acetone fermentation, B., 872.
- Tschelincev, G. V., [mechanism of ester condensations], A., 472. Mechanism of condensation of carbonyl compounds by means of alkali metals, A., 729.
- and Osetrova, E. D., α -benzoylbutyrolactone, δ -keto- δ -phenyl- n -butyl alcohol, and δ -keto- δ -phenyl- n -butyl bromide, A., 980.
- and Rodnevitch, B. N., synthesis of vanillin, B., 1067.
- Tschelincev, V. V., oxonium compounds; complex acidic oxonium compounds of organic oxygen compounds, A., 325. Oxonium compounds; acidic complexes of quinones and their chlorination and bromination, A., 982. Distillation of shale and chemical treatment of shale tars, B., 1028.
- [with Nikitin, E. K.], condensation of furan derivatives. IV. Coloured products of condensation of furfuraldehyde with acetone in aqueous sulphuric or hydrochloric acid, and theory of reaction of alcohols and olefines with furfuraldehyde, A., 984.
- [with Tiliitschenko, M. N.], condensation of furan derivatives. V. Application of the furfurylidene test to condensation of acetone with formaldehyde, A., 984.
- Tscheltzov, V. S. See Tschibisov, K. V.
- Tscheltzova, Y. See Pervosvanski, V.
- Tschepelevitzki. See under Chepelevetzki.
- Tscherdintsev, V. V., classification of atomic nuclei, A., 8.
- Tshebernikov, P. See Dobrotin, N. A.
- Tscherkasova, L. S. See Borshkovski, S. E.
- Tscherkess, A. I., Melnikova, V. F., and Dubaschinskaja, S. M., toxicology of aromatic nitro-compounds. I. 2,4-Dinitrophenol, A., 1159.
- Tscherni, A. T., determination of magnetite in iron ores, and control of magnetic concentration of ores, B., 951.
- Tscherniachovski, J. M., Eliseev, P. F., and Nasakin, S. P., replacement of ether by Nasakin solvent in extraction of acetic acid, B., 1036.
- Tscherniaev, I. I., and Rubinstein, A. M., Stromholm's triamminesulphite, A., 461. Reaction of pyridine with Cleve's and Gerard's salts, A., 506.
- Tschernichov, J. A., and Guldina, E. J., volumetric determination of beryllium and silicon in solutions of their complex fluorides, A., 1093.
- and Karssajevskaya, M. P., volumetric determination of niobium, A., 721.
- and Uspenskaja, T. A., determination of stibnite sulphur in ores and minerals, B., 1049.
- Tscherning, K., [preparation of the male sexual hormone], A., 1274.
- See also Butenandt, A.
- Tschernjak, P. S. See Jakobsson, L. A.
- Tschernoshukov, N. I., oxidisability, oiliness, and surface tension of lubricating oils, B., 8.
- Diubakova, L. S., and Medvedev, G. V., refining of light products from the low-temperature carbonisation of coal, B., 53.
- and Gutzait, A. M., influence of refining on oxidisability and oiliness of lubricating oils, B., 8.
- and Krein, S. E., oxidation of oils, B., 711.
- Tschernov, I. G. See Fleckel, I. M.
- Tschernozevov, P. J., low-temperature carbonisation of Tkivbulsk coals, B., 436. Industrial utilisation of Transcaucasian coals by means of low-temperature carbonisation, B., 1123.
- Tscherntzov, O. M., and Drozdov, N. S., preparation of phenyl- β -naphthylamine, B., 182.
- See also Drozdov, N. S.
- Tschernuishev, V. V., and Seliski, J. P., cyaniding of iron for separators, B., 498.
- Tschertkova, S. I. See Diakova, M. K.
- Tschervjakov, N. I., and Ostroumov, E. A., determination of small amounts of vanadium in uranium preparations, A., 1216; B., 60.
- Tschesalkina, P. A. See Dragunov, S. S.
- Tschesche, R., plant cardiac poisons. III. Degradation of a genus of the cardiac poisons to a bile-acid derivative. V. *Ætioallocholan* acid and its identification with the acid obtained by degradation of azarigenin. VI. Genins of the heart poisons of a species of *Strophanthus hispidus*, A., 342, 396, 624. Neutral saponins; conversion of digitogenin, gitogenin, and tigogenin into identical derivatives, A., 986. Chemistry of saponins, A., 1244.
- and Hagedorn, A., neutral saponins. II. Degradation of a genus of the neutral saponins to a derivative of the bile acids, A., 1126.
- and Knick, H., plant cardiac poisons. IV. Constitution of trihydrostrophanthidin, A., 396.
- Tschesnokov, N., commercial rubber with fine pores and cells, made with carbon saturated with carbon dioxide, B., 861.
- and Michailenko, G., use of Veimarn (Leningrad district) slate tar as a softener in rubber mixtures, B., 861.
- Tschetverikov, N. M. See Pliuschkin, E. Z.
- Tschetverikov, S. D., and Fioletova, A. F., celadonite from Koktebel (Crimea), A., 954.
- Tschevitshalova, K. K. See Klebanski, A. L.
- Tschibisov, K. V., physico-chemical interpretation of ripening of photographic emulsions, B., 525. Dependence of the Schwarzschild effect on preparation of the emulsion, B., 525. Photographic activity of gelatins, B., 574.
- and Makarov, N. V., preparation of emulsions for optical sensitising, B., 525.
- and Tscheltzov, V. S., optical sensitisers for use in emulsions, B., 525.
- See also Makarov, N. V., and Makarov, S.
- Tschikin, V. K. See Zacharova, M. I.
- Tschilingarian, A. See Sukuevitch, J.
- Tschilkov, J. I. See Gurvitch, M. N.
- Tschirch, E., and Krüger, D., application of the iodide-thiocyanate process in determination of urinary sugar, A., 1006.
- See also Krüger, D.
- Tschirkov, S. K., determination of solubility, density, viscosity, and conductivity of solutions of salts, A., 321.
- and Schpikelman, A. I., determination of bromine in solutions containing potassium, sodium, and magnesium chlorides, A., 316. Determination of iodides in presence of bromides and chlorides by potentiometric titration, A., 595.
- Tschirkova, H. T. See Zaleski, M. D.
- Tschirvinskaja, E. J. See Gurevitch, Z. B.
- Tschishik, A. A. See Fedoteev, P. P.
- Tschistov, I. F., and Terekhov, A. M., preparation of higher ketones (homologues of acetone), B., 1036.
- Tschistovitch, R. See Glikman, L. A.
- Tschitschibabin, A. E., and Bestougey, M., action of ethylene oxide on hydrogen sulphide, A., 606. Phosphoric acid as condensing agent, A., 614.
- Tschmutov, K. V., thermostatic relay, A., 319.
- Tschopp, E., activity of androstenedione on sexual organs of the male rat, A., 1285.
- Tschotkevitch, V. I. See Schubnikov, L. V.
- Tschubarov, R. See Prileshaeva, N.
- Tschuchanov, Z. F. See Grodzovski, M. K.
- Tschudy, F., separation of composite materials [Fe blast-furnace dust], (P.), B., 1051.
- Tschufarov, G. I., and Agafonov, N. N., velocity of reaction in systems consisting of two liquid phases, A., 1328.
- Agafonov, N. N., Tatievskaja, E. P., and Kulpina, K. I., effect of porous silica gel catalyst carrier on velocity of oxidation of sulphur dioxide gas. I., A., 1329.
- Tschugunov, P. See Frankin, A.
- Tschuksanova, A. A., and Bilik, I. M., analysis of sulphonation product in preparation of peri-acid, B., 91.
- Tschulkov, J. I., removal of phenols from waste waters, B., 336.
- and Veisbrut, L. A., recovery of phenols from primary tars, B., 984.
- Tschumi, L., and Stalé, J., influence of manuring on alkalinity of plant ash, B., 422, 967.
- Tschurbakov, A. M. See Tischtchenko, D. V.

- Tseng, A. T. K., and Hydraulic Brake Co., hydraulic brake fluid, (P.), B., 1078.
- Kempel, A. B., Schar, R., and Rex-Hide Rubber Manufg. Co., moulded brake-lining material, (P.), B., 388.
- Tseng, C., m.-p. determination. II. Evaluation of stem correction and principle of simultaneous determination of m.p. by capillary tube method, A., 57.
- Tseng, C. L., detection of elements in organic compounds. I. Simultaneous detection of carbon, hydrogen, and mercury. II. Improved sodium fusion test for the detection of sulphur, nitrogen, iodine, bromine, and chlorine. III. Detection of phosphorus, arsenic, and antimony, A., 876, 1140.
- and Fan, F. M., preparation of hydrazobenzene, A., 743.
- and Ho, T. S., preparation of inorganic reagents. II. Phosphorus tribromide, A., 715.
- Ho, T. S., and Chia, P. T., preparation of inorganic reagents. III. Hydrobromic acid, A., 715. Preparation of *n*-butyl bromide, A., 1349.
- Hsü, M., and Hu, M., preparation of inorganic reagents. I. Arsenic chloride, A., 715. Nickel-plated Parr bombs for peroxide fusion, A., 1340. Preparation of alkyl bromides by the phosphorus tribromide method. II. Preparation of hexyl, cyclohexyl, and *tert*-amyl bromides, A., 1348.
- and Hu, M., quinones. III. Preparation of α -naphthaquinone by hydrolysis of 4-nitroso- α -naphthol, A., 863. Gluten hydrolysis and preparation of *d*-glutamic acid hydrochloride, B., 872.
- Hu, M., and Chiang, M. C., determination of organic halogens. I. Parr bomb method. II. Stepanov method, A., 876, 1258.
- and Sze, C. H., preparation of inorganic reagents. IV. Mercuric bromide. V. Sulphuryl chloride, A., 715.
- Tseng, T. Y. See Tang, T. H.
- Tsigler, V. D. See Schukarev, A. N.
- Tsimbalist, B. I. See Lichoscherstov, M. V.
- Tspin, G. S., and Schtschetinina, L. A., analysis of dinitrohydroxydiphenylamine, B., 296.
- Tsu-Tung, K., wave-length of secondary γ -radiation accompanying anomalous absorption of hard γ -rays, A., 910.
- Tsuchida, R., spectrographic method for study of unstable compounds in equilibrium, A., 446.
- Tsuchiya, T. See Toyama, Y.
- Tsuchiya, V. M., butyl alcohol-acetone fermentation, B., 1016.
- Tsuda, K. See Kondo, H., and Ochiai, E.
- Tsudzumura, H., influencing parasympathetic action by insulin, A., 411.
- Tsuge, Y., oxidation of nucleic acid in tissues. I. Effect of the sodium salt on dehydrogenations, A., 1272.
- Tsui, Y. F. See Adolph, W. H.
- Tsnji, Y. See Itano, A.
- Tsujimoto, M., hydrocarbon in basking shark. I. A., 233. Body-oil of "aburazamé" (*Squalus sucklii*, Girard), A., 882. Shark-liver oils, A., 1145. Basking shark-liver oil, B., 641. New hydrocarbon in basking shark-liver oil, B., 641. Fatty acids of Japan wax, B., 859.
- and Koyanagi, H., fatty substances of shellfish. IV., A., 772. Whale-shark-liver oil, A., 1144.
- Tsujimura, M., crystalline tea-tannin from green tea, A., 673.
- Tsukuda, T. See Tanaka, Yoshio.
- Tsumaki, T., cyclic iron compounds formed by auxiliary valencies, A., 750.
- Tsuneoka, S., synthesis of benzene from carbon monoxide and hydrogen under ordinary pressures. XXI. and XXII., B., 132.
- and Fujimura, K., synthesis of benzene from carbon monoxide and hydrogen under ordinary pressure. XX., B., 293.
- and Murata, Y., synthesis of benzene from carbon monoxide and hydrogen under ordinary pressure. XXIII.—XXVI., B., 581, 1081.
- See also Fujimura, K.
- Tsunoda, Y. See Kimura, K.
- Tsunoo, S., synthesis of optically active isoscrine, A., 1110. Preparation of aminohydroxypropylsulphonic acid and its derivatives, A., 1111. Changes in the pancreas after ligation of the pancreatic duct, A., 1144. Fate of ethynal in animals and men, A., 1154.
- Tsushima, K. See Iio, T.
- Tsutsui, T., perfusion of the stomach. VI. Uricolytic processes, A., 1152.
- Tsuzuki, Y., multiple condensation of fumaric and maleic acids with ethylene glycol, A., 474. Ethyl acetone-*d*-tartrate and its optical activity, A., 1106.
- Tuan, H. C., 2-mesityl-1:4-naphthaquinone and its derivatives, A., 1126.
- and Wu, N., dichloronitroiodobenzenes, A., 1113.
- Tubus Akt.-Ges. See Singer, Fritz.
- Tucakov, Y. See Gillot, P.
- Tuchfarber, F., Callaway, R. W., and Mann, A. N., finishing of wood, (P.), B., 593.
- Tuchman, L. See Antopol, W.
- Tucholski, T., thermal analysis of picrates, B., 382.
- Tuchovitzki, N. V., utilisation of solidified pine pitch. I., B., 1055.
- Sorokin, M. N., and Verzhbitskaja, B. F., contents of unsaponifiable matter and substances which can be salted-out in resin, B., 815.
- See also Filipovitch, I. V.
- Tuck, J. L. See Fairbrother, F.
- Tucker, D. A., Marsh, G. L., and Cruess, W. V., canning of apple juice, B., 1066.
- Tucker, G. R., coloured concrete, (P.), B., 593.
- Tucker, J. M., and Burke, T. E., determination of moisture in cereal products by distillation with tetrachloroethane, B., 1114.
- Tucker, N. B., normal fatty acid amides of ethylenediamine, A., 1487.
- Tucker, S., and Minerals Separation, Ltd., froth flotation and other concentration of [gold] minerals, (P.), B., 999.
- Tucker, S. H. See Browning, C. H., and Dunlop, (Miss) H. G.
- Tucker & Co., Ltd., J. H., and Hannam, J. N. R., prevention of rusting of ferrous metals, (P.), B., 235.
- Tuenter, J. P. A., influence of light on stability of bleaching solutions, B., 800.
- Tuffi, R., and Borghetti, E., detection of rice in wheat flour, B., 1113.
- Tufts, E. V. See Greenberg, D. M.
- Tukats, S., evaluation of ergot with the nephelometer, B., 332.
- Tukkimäki, K. R. See Palomaa, M. H.
- Tuli, G. See Bhatnagar, S. S.
- Tullis, D. R., and Oakley, P., refining and casting of non-ferrous metals and alloys, (P.), B., 235.
- Oakley, P., and Fenner, G. P., refining of zinc, (P.), B., 235.
- Tumarkiu, D. See Sakostschikov, A. P.
- Tumerman, L. A., dependence of the fluorescence spectrum on viscosity of the solvent, A., 807.
- See also Levschin, V. L.
- Tunell, G., and Ksanda, C. J., crystal structure of calaverite, A., 286.
- Posnjak, E., and Ksanda, C. J., geometrical and optical properties and crystal structure of tenorite, A., 813.
- Tung, T. Y. See Courtot, C.
- Tunger, H. See Gootz, R.
- Tunley, A. A., Baker, G. R., Baker Perkins Ltd., and Anc. Établ. A. Savy, Jeanjean & Co., cooling of roll-refiners [for chocolate, etc.] or similar mills, (P.), B., 754.
- Tuorila, P., and Teräsuvuori, A., utility of analytical methods for determining fertiliser requirements of soils. I. Phosphate content of nitric acid extracts of soils and crop increases due to phosphate manuring, B., 966.
- Tuot, M., bromo-derivatives of olefines C_8 to C_{11} , A., 844.
- Tupholme, C. H. S., thiourea improves fastness of acetate [dyeings], B., 492.
- Oiling of wool, B., 665.
- Turbet. See Chelle.
- Turbo-Mixer Corporation. See MacLean, G.
- Turbovsky, M. W., Filippello, F., Cruess, W. V., and Esau, P., use of tannin in wine-making, B., 1016.
- Turcan, J., action of nitrosyl chloride and nitrosylsulphuric acid on aromatic Schiff's bases, A., 750.
- Turcatti, E. S. See Lewis, J. T.
- Turchin, T. V., plant absorption of citrate-soluble phosphates, B., 372.
- Turck, H. E. See Åkerlöf, G.
- Turek, J. A. V., jun. See Gilman, H.
- Turco, E., detection of coconut oil in butter by Hoton's method, B., 43.
- Turetzkaja, R. C. See Sobolevskaja, O. J.
- Turgel, K. I. See Fleckel, I. M.
- Turk, L. M., nitrogen fixation in Michigan soils, B., 917.
- Turkevich, J., and Taylor, H. S., activated adsorption of hydrocarbons, A., 28.
- Turkington, V. H., and Bakelite Corp., protective [nitrocellulose] coating composition, (P.), B., 161.
- See also Moore, R. J.
- Turley, H. G., Windus, W., and Röhm & Haas Co., unhairing of hides or skins, (P.), B., 777.
- Turneure, F. S., tin deposits of Llallagua, Bolivia. I. and II., A., 469, 601.
- Turner, A. A. See McMullen, C.
- Turner, A. G., report of horticultural service, 1931—1932; [olives], B., 38.
- Turner, E. E. See Lesslie, (Miss) M. S.
- Turner, E. P., and Cardox (Gt. Britain), Ltd., blasting cartridges, (P.), B., 526.
- Turner, F. J., mineral facies in metamorphic rocks, A., 725.
- and Hutton, C. O., stilpnomelane and related minerals as constituents of schists from Western Otago, New Zealand, A., 323.
- Turner, H., and Johnson, Matthey & Co., Ltd., silver solders, (P.), B., 999.
- Turner, H. A., oxidation of cellulose, B., 1087.

- Turner, H. A., Nabar, G. M., and Scholefield, F., oxidising agents and vat-dyed cotton, A., 170. Effect of reduced vat dyes on hypochlorite oxidation of cellulose, B., 353.
See also Driver, J. E.
- Turner, H. G. See Keene, W. L.
- Turner, H. H., diabetes insipidus: treatment with intermedin and pitmelanin, A., 1401.
- Turner, H. M. See Rule, H. G.
- Turner, K. B. See Bidwell, E. H.
- Turner, L. B. See Wiezevich, P. J.
- Turner, P. E., lime-salt experiment [on sugar-cane soils], B., 820. Effect of heavy dressings of ammonium sulphate on soil content of nitrogen, B., 820. Effect of heavy dressings of ammonium sulphate on yield of [sugar] cane and available potash in soil, B., 820. Manganese in relation to juice purity [of sugar cane], B., 823. Potassium in molasses, B., 823. [Manganese in] Trinidad limestone [marl and soil], B., 917. Soils of the Orange Grove estate, B., 917.
- Turner, R. G., iodine and thyroid hyperplasia. I. Iodine content of human skimmed milk from goitrous and non-goitrous regions, A., 1009.
- Turner, W. A. See Meigs, E. B.
- Turner, W. E. S., testing of glass containers for chemical durability, B., 629. Chemical durability of glass, B., 629. Influence of ammonium sulphate on amount of selenium needed for decolorising [glass], B., 803.
[with Blackmore, H. S., Dimbleby, V., Gill, H. S. Y., Howes, H. W., and Warren, W. J. A.], basis of a standard test for the chemical durability of glass bottles, B., 830.
See also Howarth, J. T., Holland, A. J., Howes, H. W., Longmuir, B., Maskill, W., Preston, E., and Watertou, S. C.
- Turney, G. L. See Harrison, E. P.
- Turova, M. B., Balandin, A. A., Merkurova, M. S., and Guseva, M. V., catalytic preparation of butyl acetate and butyl butyrate, B., 395.
- Turova-Pollak, M. B., isomerisation phenomena in the cracking of cyclohexane derivatives by aluminium chloride, A., 1358.
See also Zelinski, N. D.
- Turowska, I., sulphur bacteria. II. *Cyanophytes* accompanying sulphur bacteria. III. Cell structure in sulphur bacteria, A., 125.
- Turpain, A., and De Laverne, R. de B., effect of the magnetic field on Brownian movement, A., 295.
- Turpeinen, O., determination of lipins in micro-organisms, A., 899.
- Turrentine, J. W., composition of potash fertiliser salts for sale on the American market, B., 671.
- Turska, E., specific heat of some lanthanum and scandium salts, and of monazite, A., 289.
- Turski, W. See Cybulski, K.
- Turski, J. S., formation of benzanthrone from anthraquinone and glycerol, A., 215.
- Turtschin, T. V., assimilability by plants of citrate-soluble phosphoric acid, B., 820. Effect of potassium and phosphorus on utilisation of nitrate- and ammonia-nitrogen by plants, B., 1157.
- Turvey, J. G., principles of vibrating screen practice, B., 529.
- Tuschhoff, E., Westberg, T., and Wahlberg, Y., measuring the open and closed pores in granular fireclay, B., 406.
- Tuthill, E. See Gamble, J. L.
- Tutin, J., disintegration by slow neutrons, A., 277.
- Tutiya. See under Tsuchiya.
- Tutkiewitsch, L. See Alpern, D.
- Tuttle, C. D., and Huddleson, I. F., oxidation-reduction studies of growth and differentiation of species of *Brucella*, A., 407.
- Tuttle, M. H. See Miller & Co., Inc., M. B.
- Tuttle, W. M., ["antique"] bricks, (P.), B., 806.
- Tutundzie, P. S., apparatus for carbon dioxide determination according to Pettenkoffer, A., 839. Simultaneous cathodic and anodic direct-current polarisation of electrodes. I. Electrodes of platinum, palladium, and gold, A., 1205. Galvanic utilisation of fuels, B., 292.
- Tuve, M. A., Dahl, O., and Hafstad, L. R., disintegration experiments on elements of medium atomic number, A., 7. Production and focussing of intense positive-ion beams, A., 1185. High-voltage technique for nuclear physics studies, A., 1296. Stable hydrogen isotope of mass three, A., 1448.
See also Hafstad, L. R.
- Tuwiner, S. B. See Work, L. T.
- Tuzioka, S., muscle-glycogenesis in splenectomised rabbits, A., 410. Bile acids and calcium metabolism. X. Urine- and bile-calcium in normal and thyro-parathyroidectomised dogs. XI. Calcium excretion in thyro-parathyroidectomised dogs, A., 1158, 1531.
- Tuzson, P. See Zechmeister, L.
- Tweedy, S., fusibility of coal and coke ash, B., 1027.
- Tweedy, W. R., Bell, W. P., and Vicens-Rios, C., parathyroid hormone, A., 409.
See also McJunkin, F. A.
- Twinn, C. R., fumigants [insecticides], B., 1071.
- Twiss, D. F., chemical technology of rubber, B., 368. Rubber latex as a manufacturing material, B., 1057. and Jones, F. A., restraining of vulcanisation in rubber manufacture, B., 467.
See also Dunlop Rubber Co., and Internat. Latex Processes.
- Twitchell Process Co. See Reddish, W. T.
- Twort, C. C. See Bottomley, A. C.
- Twyman, F., instruments used for spectrum analysis and absorption spectrophotometry, A., 320.
- Tyabji, A. See Naegeli, C.
- Tyagno-Ryadno, M. G. See Sorokina, A. V.
- Tyce, G. C. See Brit. Celanese.
- Tyler, C., ammonia as a source of hydrogen for hardening oils, B., 269.
See also Du Pont de Nemours & Co., E. I.
- Tyler, G. M., apparatus for disintegrating, mixing, and screening pulverulent material, (P.), B., 754.
- Tyndall, A. M., and Pearce, A. F., variation of the mobility of gaseous ions with temperature. I. Positive ions in their own gas, A., 909.
- Tyndall, E. P. T., elastic constants of the zinc crystal, A., 572.
and Schilling, H. K., mosaic zinc crystals, A., 1306.
- Tyner, E. H., feeding power of plants for the potassium in felspar, exchangeable form, and dilute solution, B., 820.
- Tyrer, D. See Imperial Chem. Industries.
- Tyson, W. R. See Lutz, R. E.
- Tyson, W. W. See McCrea, F. D.
- Tzeitlin, A. N., kinetics of absorption of oxides of nitrogen by 78% sulphuric acid, A., 1208.
- Tzolidas, I. E., and Ivanov, A. E., exchange reactions in carbonate soils salinised with chlorides and sulphates, B., 421.
- Tzinberg, S. L., chromium carbides, A., 461. Systematic analysis of aluminium oxide in steel, B., 410.
- Tziurupa, B. N., and Bezruchenko, N. Z., causes of rice failure on second year of planting under conditions of constant flooding in formerly submerged soils of Kuban, B., 37.
- Tzoni, K. A., effect of pituitary extracts on viscosity of blood, and its antagonistic effect on insulin, A., 259.
- Tzuiba, A. N. See Nametkin, S. S.
- Tzuibasov, F. P., and Efremov, V. P., destructive hydrogenation under pressure of Kashpira shales, B., 53. Thermal decomposition of shale, B., 53.
- Tzuirulnikov, N. See Pavlovitch, P.
- Tzukerman, B. I., application of titanium salts as leather pigments, B., 419.
and Metlitzkaya, R. A., influence of pH of dyeing solutions on the dyeing of chrome[tanned] leather with acidic and substantive dyes, B., 401.
See also Goldshtein, V. A.
- Tzukkervanik, I., condensation of alcohols with aromatic hydrocarbons in presence of anhydrous aluminium chloride. I. Condensation of *tert.*-aliphatic alcohols with benzene and toluene, A., 967.
- Tzurikov, F. F. See Levina, P. J.
- Tzvetkov, V. See Frederiks, V.

U.

- Ubbelohde, A. R., thermal conductivity of polyatomic gases, A., 691. Thermal conductivity of polyatomic gases; erratum, A., 923.
and Egerton, A., significance of pro-knocks in hydrocarbon combustion, A., 172.
See also Egerton, A.
- Ubbelohde, L., viscosity measurements of R. O. Herzog and collaborators, A., 816, 1342. Nomogram for the Hagenbach correction for the suspended level viscosimeter, A., 1219.
- Ulrich, C., and Walther, C., recognition of tars and bitumen from their viscosity-temperature characteristics, B., 1029.
and Walther, C., temperature bath for scientific measuring instruments, A., 1339.
- Uber, A. See Seidel, F.
- Uchida, S., hydrogenation of Japanese coals, B., 612.
- Ai, S., and Nagasawa, J., fireproofing of wood. I. Apparatus for determining the ignition point of wood, B., 632.

- Uchida, S., and Fujita, S., pressure drop through dry packed towers. I.—III., B., 177.
- and Tanabe, S., high-velocity thermocouple for measurement of true gas temperatures. I. Conditions required for the correct measurement of gas temperatures. III. Errors of the high-velocity thermocouple, B., 257.
- Yagi, S., Tanabe, S., Tezuka, K., and Fujita, S., high-velocity thermocouple for measurement of true gas temperatures. II. Portable high-velocity thermocouple and some of its applications, B., 257.
- See also Fujita, S.
- Ucko, H., mercury-precipitating reaction of serum from hepatic affections, A., 643.
- Udaondo, C. B., Sohteingart, M., and Gaibrois, R., magnesium content of the cerebrospinal fluid: relation to blood-magnesium, A., 1005.
- Uddeholms Aktiebolag Skoghalls-Verken, viscose for producing artificial silk, films, lacquers, bands, (P.), B., 541.
- Uddin, M. See Samuel, R.
- Udintzeva, V. S. See Kuzminich, I. N.
- Udluft, A. See Paackelmann, W.
- Udovenko, N. V., simplified method of analysis of limestone, B., 60.
- Udovenko, V. V. See De Kolosovski, N. A.
- Udrycki, A. See Sereda, J.
- Ueda, S. See Ueno, Sei-ichi.
- Uehling, E. A., transport phenomena in Einstein-Bose and Fermi-Dirac gases. II., A., 157. Polarisation effects in the positron theory, A., 1047.
- Uemoto, T., electrical precipitation of dust, B., 681.
- Uémura, T., and Inamura, Y., absorption spectra of mixed nitrogen-containing compounds and of their isomerides, A., 913.
- and Suéda, H., p_H in aqueous solutions of complex cobaltamines and their absorption spectra. I. and II., A., 579, 703. p_H in, and absorption spectra of, aqueous solutions of chromium amines. I., A., 1202.
- Ueno, M. See Mizoshita, T.
- Ueno, Sei-ichi, synthetic fats. I. Manufacture of synthetic tallow and butter, B., 859. Solvent power of tetralin, decalin, hexalin, and methylhexalin, B., 1036. Apparatus for fractional distillation of solid fatty acids and alcohols under reduced pressure and in superheated steam, B., 1054.
- and Iwai, M., constituents of menuke oil. II. Determination of unsaponifiable matter, B., 733.
- and Komori, S., pre-estimating [predicting] the browning of soaps, B., 317. Unsaponifiable matter of some fish-liver oils. I., B., 912. Composition of Itoyo fish oil, B., 912.
- Kuzei, N., and Matsuda, Sumio, preparation of edible hardened fish oils, B., 912.
- and Matsuda, Sumio, fractional distillation of saturated fatty acids of highly hydrogenated [fish] oils, B., 1053.
- Ota, Yasuo, Yokoyama, S., and Matsuda, Sumio, vitamin-E. I. and II. Measurement of absorption band, A., 1037.
- and Takehara, S., conversion of fatty acids and their esters into higher alcohols by catalytic reduction under moderate pressure, B., 1149.
- Ueno, Sei-ichi, and Ueda, S., conversion of fatty acids and their esters into higher alcohols by catalytic reduction under high pressure, B., 1149.
- Ueno, Shigezo, and Sekiguchi, H., determination of dye intermediates by coupling. I. Selection of diazo-solutions for coupling, B., 584.
- and Suzuki, Tazō, determination of resorcinol by nitrosation, B., 584. Determination of traces of nitro-compound in aniline or *o*-toluidine, B., 584.
- Ufford, C. W., relative transition probabilities for almost closed shells, A., 1050.
- Uga, Y., peroxidase reaction. LIII. Arakawa reaction and calcium content of human milk, A., 1266.
- Ugai, T., and Hayashi, M., thiocarbonylsalicylamide (4-keto-2-thioketo-3,4-dihydro-1:3-benzoxazine). I., A., 1510. and Izumi, S., synthesis of β -bromonicot-diethylamide, A., 1504.
- Ugami, H., reducing substance obtained by hydrolysis of alginic acid. II., A., 327.
- Ugriumov, P. G. See Batalin, V. S., and Kursanov, A. L.
- Ugriumov, V. D., preparation of pyrocatechol and pyrogallol from wood tars, B., 1028.
- Uhara, I., thin films of insoluble substances on liquid surfaces, A., 442. Relations between fundamental electrochemical quantities, A., 706.
- Uhde, F., [nozzle for] introduction of materials of the character of cement slurry into rotary kilns, etc., (P.), B., 271. Granulated materials, (P.), B., 531.
- Uhl, A. H., non-heptane constituents of digger pine (*Pinus sabinana*), A., 1180.
- Uhle, D. J., and Grunewald, M. E., [pre-] heating of cement raw material, (P.), B., 357.
- Uhlenbeck, G. E., theory of the positron, A., 1439.
- See also Fermi, E., Konopinski, E. J., Rose, M. E., and Wu, T. Y.
- Uhlenbroock, K. See Wachholder, K.
- Uhlenhuth, P., and Remy, E., antibodies and carbohydrates. II. Experiments with glucose, glucosamine, amygdalin, cathartic acid, and a denitrified gum-arabic preparation, A., 510.
- Uhrova, A., hormonal nature of [growth-] inhibiting action of leaves of *Bryophyllum crenatum*, A., 548.
- Ujhelyi, E. See Zechmeister, L.
- Ukholin, S. A. See Leitman, S. I.
- Ulander, P. H. N. See Pearson, J. L.
- Ulrich, H. See Jaretsky, R.
- Ulbricht, E. G. See Standard Oil Development Co.
- Uleek. See under Vleek.
- Ulich, H. (Aachen), and Heyne, G., kinetics of the Friedel-Crafts ketone and hydrocarbon syntheses, A., 1207.
- Ulich, H. (Rostock), Feisker, H., and Audieth, L. F., dipole moments of hydrazine and its derivatives. II., A., 1304.
- Ullman, R. B., and Parsons, G. M., filtration of draught beers, B., 871.
- Ullmann, L. von, and Spech, G., conversion of phenylglycinenitrile into its amide by means of hydrogen peroxide; halogen and acyl derivatives of the amide, A., 613.
- See also Mihalovici, A.
- Ullrich, C. See Ubbelohde, L.
- Ullrich, F., and Ditz, H., yellow coloration of hydrochloric acid containing selenium. II. Behaviour of hydrochloric acid containing selenium on cooling and on diluting with water, A., 1334.
- See also Ditz, H.
- Ullrich, H., penetration of anions in *Valonia*, and its relation to cell growth, A., 552.
- Ullyot, G. E. See Fuson, R. C.
- Ulmann, M., osmometric investigations of dilute solutions of polymeric carbohydrates. VII. Molecular size of technical cellulose acetates [cellite]. VIII. State of technical cellulose acetate [cellit] in solution, A., 331, 965.
- See also Hess, K.
- Ulmer, H. M., and Lanning, J. G., leather dressing, B., 470.
- Ulrich, H., trade names and chemical composition of more important solvents and softeners, B., 239. Application of hardenable oil-reactive 100% phenolic resins to varnishes, B., 366. Esterified copal resins and their application in the varnish industry, B., 510. Crystallisation, frosting, and gelation of tung oil, B., 732. Use in oil varnishes of reactive, hardenable, 100%-phenolic resins, B., 914. Oils of interest in varnish technology, B., 1055.
- Ulrich, W. See Lockemann, G.
- Ultée, A. J., rubber resins, A., 134.
- Ulzer, F., and Gruber, H., preparation and properties of "acid wax" from human tubercle bacilli, A., 407. Fatty acids of human tubercle bacilli, A., 407.
- and Haas, W., exact analysis and characterisation of saponins, A., 228.
- Umanschi, D. See Procopiu, S.
- Umanski, A., theory of the process of electrolysis of aqueous chromic anhydride, B., 273.
- Umanski, I., and Vexler, V., dispersion of X-rays by nickel. I. Atomic-factor curve for nickel. II. Relationship between the intensity of the diffraction lines and the temperature, A., 686, 1307.
- Umanski, M. M., electronography—a new method of examination of substances, A., 58.
- Umbreit, S. See Marconi's Wireless Telegraph Co.
- Umeda, K. See Kosuzi, T.
- Umetu, K. See Ishihara, T.
- Umezawa, H. See Tamamushi, B.
- Umino, S., specific heat of iron-carbon systems at high temperatures, and the heat changes accompanying those of phase, A., 690.
- Umrat, K., stimulation process in *Spirogyra* and *Vaucheria* and potential measurements in plant cells, A., 419.
- Umrikhin, P., defects in chromium automotive steels and their elimination, B., 499.
- Umstätter, H., changes of state of viscous systems. IX. Viscosity and elasticity, X. Turbulence viscosity, A., 438, 575.
- Una Welding, Inc. See Austin, John B.
- Una Welding & Bonding Co. See Rood, A. C.
- Underpinning & Foundation Co., Inc. See Bonine, C. E.
- Underwood, A. J. V., historical development of distilling plant, B., 257.
- Underwood, E. J., enzootic marasmus; iron content of kidney, liver, and spleen, A., 108.

- Underwood, H. B., and Franklin, G. K., composition [containing rubber], (P.), B., 369.
- Underwood, H. G., and Dains, F. B., action of perthiocyanic acid on amines, A., 1488. Dithiazine rings, A., 1512.
- Underwood, H. W., jun., and Walsh, W. L., preparation of substituted *o*-aroylbenzoic acids in identification of aromatic hydrocarbons, A., 859.
- Underwood, J. E. See Weitzel, C. F.
- Underwood, N., photo-electric properties of the (100) and (111) faces of a single copper crystal, A., 556.
- Ungar, G., Contiades, X. J., and Grossiord, A., liberation of histamine-like substances by excitation of the peripheral end of the splanchnic nerve: hæmorrhagic lesions of the intestine by intra-arterial injections of histamine, A., 1534.
- Contiades, X. J., and Palmer, R. G., liberation of histamine-like substances in the infarction of the intestine, A., 1532.
- Zerling, M. R., and Pocoulé, A., histamine-like substance liberated by anti-dromic excitation of sensitive nerves, A., 528.
- See also Tinel, J.
- Ungar, Georg, plastometric investigations on substances of high consistency. II. Application of hemisphere-plastometer to determination of shear curves and absolute shear constants. III. Determination and evaluation of velocity distribution curves. IV. Determination and evaluation of shear curves of clay slips, A., 579; B., 1, 545. Preparation and serviceability of developable and fixable bleaching-out dyo layers from the silver salts of organic dyes, B., 333.
- Ungar, R. M., and Schidrowitz, P., rubber, (P.), B., 862.
- Ungemach, H., sulphated minerals of Chili, A., 1100. Syntaxy and polytypy, A., 1453.
- Ungemach, O. See Auwers, K. von.
- Unger, A. See Thiel, K.
- Unger, E., report of 1934 of the Strength Testing Committee [of the Verein der Zellstoff- u. Papier-Chemiker u. -Ingenieure], B., 587.
- Unger, E. D. See Prutton, C. F.
- Unger, H. J. See Norris, W. V.
- Unger, L., Moore, M. B., Cromwell, H. W., and Seeber, C. H., pollen and pollen extracts. XI. Chemical nature of pollen allergens, A., 549.
- See also Moore, M. B.
- Unger, M. V. See Kotnitzki, A. I.
- Ungerer, E., nutrient intake of plants from flowing and stationary nutrient solutions. I. and II., A., 131, 1037. Origin of the pigment in *Azotobacter chroococcum*, A., 250. Action of sodium chlorate on plants and soils, B., 821.
- Ungley, C. C., and James, G. V., effect of yeast extract in anæmias. II. Nature of the hæmopoietic factor in yeast effective in pernicious anæmia, A., 649.
- Unichem Chemikalien Handelsgesellschaft Akt.-Ges. See Schiran, E., and Schrauth, W.
- Union Carbide & Carbon Research Laboratories, Jones, L. T., Kennedy, H. E., and Rotermond, M. A., depositing molten metal on metallic bodies, particularly electric welding, (P.), B., 1099.
- Union Chimique Belge Société Anonyme, and Guillaissen, J., ammonium sulphate, (P.), B., 147.
- Union Oil of California, and Gard, C. D., distillation unit, (P.), B., 1076.
- and Merrill, D. R., polyglycol arsenites, (P.), B., 1130.
- and Ragatz, E. G., absorption of [condensable] gases, (P.), B., 1077.
- See also Aldridge, B. G., Blount, A. L., Bray, U. B., Chesny, H. H., Dunham, R. A., Flaxman, M. T., Gard, E. W., Haylett, R. E., Merrill, D. R., Page, A. G., Subkow, P., and Swift, C. E.
- Union Switch & Signal Co. See Williams, A. L.
- United Carbon Co., granules of carbon black, (P.), B., 711.
- United Chromium, Inc. See Eldridge, C. H., Fink, C. G., and Mahlstedt, H.
- United Gas Improvement Co. See Evans, O. B., Fulweiler, W. H., Hall, E. L., Janeway, P. W., jun., Kunberger, A. F., Perry, J. A., Terzian, H. G., and Ward, A. L.
- United Limmer & Verwohle Rock Asphalte Co., Ltd., and Lattorf, R., artificial slabs, (P.), B., 951.
- United Merchants & Manufacturers, Inc. See Forsdale, O. H.
- United States Department of Commerce, Bureau of Standards, abridged volume correction table for petroleum oils, B., 7.
- U.S. Gypsum Co. See Hann, G. L., King, G. D., Offutt, J. S., and Parsons, J. R.
- U.S. Phosphoric Products Corporation. See Moore, G. F.
- U.S. Pipe & Foundry Co. See Langenberg, F. C.
- U.S. Rubber Co. See Cadwell, S. M.
- U.S. Steel Corporation, chromium steels [free from intercrystalline corrosion], (P.), B., 155. Thermally hardening steels and alloy steels, (P.), B., 503.
- Aborn, R. H., and Rutherford, J. J. B., heat treatment of chromium-containing corrosion- and heat-resisting steels, (P.), B., 907.
- United Verde Copper Co. See Kuzell, C. R., Ralston, O. C., and Rosenstein, L.
- Universal Grinding Wheel Co., Ltd., and Cowan, J. G., construction of kilns, (P.), B., 407.
- Universal Oil Products Co., cracking and coking of mixtures of hydrocarbon oils and solid bituminous materials, (P.), B., 180.
- and Alberding, C. H., treatment of hydrocarbon oils and coal, (P.), B., 712.
- and Alther, J. G., conversion of hydrocarbon oil, (P.), B., 217, 663, 1035. Cracking of heavy hydrocarbon oils, (P.), B., 296. Treatment of hydrocarbon oils, (P.), B., 486. Conversion of petroleum oils, (P.), B., 663.
- and Angell, C. H., treatment of hydrocarbon oils, (P.), B., 486.
- Angell, C. H., and Bergman, D. J., treatment of hydrocarbon oils, (P.), B., 893.
- and Barnes, M. W., hydrocarbon oil [conversion], (P.), B., 1035.
- and Benner, H. P., treatment [cracking] of hydrocarbon oils, (P.), B., 663.
- and Bonfield, H. T., emulsifying apparatus, (P.), B., 703.
- and Cook, R. C., conversion of hydrocarbon oils, (P.), B., 56.
- and Cutter, J., handling residuum [from cracking of hydrocarbon oil], (P.), B., 892.
- Universal Oil Products Co., and Davis, R. F., treatment of hydrocarbon oils [cracked petroleum], (P.), B., 89. Treatment of hydrocarbon oils, (P.), B., 937.
- and De Rachat, N. G., treatment of hydrocarbon oils, (P.), B., 486. Hydrocarbon oil conversion, (P.), B., 663. Cracking of hydrocarbon oils, (P.), B., 793.
- and Dubbs, C. P., treatment of hydrocarbon oils, (P.), B., 56, 663. Purification of hydrocarbon oils, (P.), B., 89. Distilling and conversion process [for hydrocarbon oils], (P.), B., 486.
- and Egloff, G., hydrocarbon oil conversion, (P.), B., 11, 1035. Chlorination of gaseous hydrocarbons, (P.), B., 92. [Stabilising] treatment of hydrocarbon oils, (P.), B., 136. Treatment [cracking] of bituminous materials and hydrocarbon oils, (P.), B., 214. Treatment of hydrocarbon oils, (P.), B., 215, 295, 345, 759, 1128. Treatment of oils, (P.), B., 217. Lubricating oil, (P.), B., 295. Cracking of hydrocarbon oils, (P.), B., 296, 663. Apparatus for cracking [hydrocarbon] oil, (P.), B., 296. Treatment [refining] of hydrocarbon oils, (P.), B., 345. Treatment of hydrocarbon gases, (P.), B., 486.
- Egloff, G., and Benner, H. P., apparatus for cracking hydrocarbon oils to produce light oils, (P.), B., 11.
- Egloff, G., and Fisher, Alfred, treatment of hydrocarbons, (P.), B., 181. Conversion of hydrocarbon oil, (P.), B., 217.
- Egloff, G., and Lowry, C. D., jun., lining for vessels holding oil, (P.), B., 90.
- Egloff, G., and Schaad, R. E., antiknock compounds, (P.), B., 759.
- and Fisher, Alfred, coking of [hydrocarbon] oil, (P.), B., 486. Treatment of hydrocarbon oils, (P.), B., 486. Apparatus for coking solid carbonisable materials, (P.), B., 792.
- and Grosse, A. von, apparatus for conducting reactions at elevated pressures, (P.), B., 1025.
- and Heid, J. B., treatment of hydrocarbon oils, (P.), B., 486. Conversion of hydrocarbon oils, (P.), B., 663, 1035. Carbon black, (P.), B., 1033.
- and Huff, L. C., conversion of hydrocarbon oils, (P.), B., 56. Reduction of residuum from cracking operation by distillation, (P.), B., 296. Cracking of hydrocarbon oils and producing ethylene, (P.), B., 343. Removal of carbonaceous materials from vessels, (P.), B., 663. Hydrocarbon oil conversion, (P.), B., 663.
- and Ipatiev, V. N., treatment [conversion into liquids] of hydrocarbon gases, (P.), B., 295.
- and Jacob, J. B., hydrocarbon oil conversion, (P.), B., 11.
- and Kirschbraun, L., conversion of oils, (P.), B., 11.
- and Levine, I., desulphurisation of hydrocarbon oils, (P.), B., 215. Treatment [refining of hydrocarbon oils], (P.), B., 794.
- and Lowry, C. D., jun., treatment of hydrocarbon oils, (P.), B., 55.
- Mather, P., and Bergman, D. J., treatment of hydrocarbon oils, (P.), B., 893.

- Universal Oil Products Co., and Mekler, L. A., heating of fluids, (P.), B., 2. Luminous flame in furnaces, (P.), B., 893.
- and Morrell, J. C., treatment of hydrocarbon oils, (P.), B., 11, 136, 344, 345, 616. Refining of cracked hydrocarbon oils, (P.), B., 55. [Stabilising] treatment of hydrocarbon oils, (P.), B., 136. Treatment of coal-tar acids, (P.), B., 214. Refining of hydrocarbon oils, (P.), B., 215, 345, 794, 1083. Hydrocarbon oil conversion, (P.), B., 296. Cracking of hydrocarbon oils, (P.), B., 296. Refining of cracked [hydrocarbon] distillates, (P.), B., 345. Coking of oil, (P.), B., 663. Treatment of hydrocarbon oils and coal, (P.), B., 712. Treatment [cracking] of hydrocarbon oils, (P.), B., 1035. Treatment [cracking] of hydrocarbon oils and coal, (P.), B., 1126.
- Morrell, J. C., and Egloff, G., treatment of hydrocarbon oils, (P.), B., 10, 136, 616. Treatment [refining] of hydrocarbon oils, (P.), B., 215, 345, 892, 1126. Cracking of hydrocarbon oils, (P.), B., 486.
- and Nelson, E. F., cracking of hydrocarbon oils, (P.), B., 663. Method of applying heat to vessels used in hydrocarbon oil conversion, (P.), B., 1035. Apparatus for applying heat to vessels used in hydrocarbon oil conversion, (P.), B., 1035.
- and Perelis, W. J., treatment of mineral oils by heat, (P.), B., 486.
- and Pyzel, R., treatment [cracking] of hydrocarbon oils, (P.), B., 662.
- and Schaad, R. E., [desulphurising] treatment of hydrocarbon oils, (P.), B., 135.
- and Seguy, J. D., cracking of hydrocarbon oils, (P.), B., 11. Hydrocarbon oil conversion, (P.), B., 11, 56, 214, 1035. Treatment of hydrocarbon oils, (P.), B., 1126.
- and Swartwood, K., conversion of hydrocarbon oils, (P.), B., 892.
- and Tropsch, H., heating of fluids, (P.), B., 882.
- and Wadsworth, J. M., hydrocarbon oil conversion, (P.), B., 11.
- and Watson, K. M., treatment of hydrocarbon oils, (P.), B., 11.
- Watson, K. M., and Mekler, L. A., heating [of hydrocarbon oil], (P.), B., 486.
- Weber, H. C., and McAdams, W. H., cracking of hydrocarbon oils, (P.), B., 56. Treating hydrocarbon oils, (P.), B., 663.
- Unkovskaja, V. A., electrolytic determination of tin in ores, B., 955. Electrolytic determination of lead in ores, B., 955.
- Unmack, A., use of the quinhydrone electrode with fat emulsions, B., 508. Errors in p_H measurements and their importance in the Wiegner effect, B., 631.
- See also Damsgaard-Sørensen, P.
- Uno, D., Katori, S., and Fujii, M., dilatometric study of cast copper bronzes; solid-solubility of the alloys. II., B., 1048.
- and Shimada, Kunio, removal of iron from crude aluminium sulphate by means of sulphinic acids, B., 802.
- Unrath, H. See Eichholtz, F.
- Unterrichter, P. See Rittmann, R.
- Untersteiner, L., analyses of fruit marmalades and fruits in syrup, B., 1020.
- Unterweyer, K. See Reindel, F.
- Unterzaucher, J., high-vacuum micro-desiccator, A., 1476. Pregl micro-analysis, A., 1476.
- Unyte Corporation. See Pungs, W.
- Upham, E. See Landauer, W.
- Upmark, A., electrical point action with spherical conductors of atomic and sub-atomic dimensions, A., 4.
- Uporova, E. See Sorokin, A.
- Upper, F. A., and Bakelite Corp., resin-bonded [abrasive] wheel, (P.), B., 195.
- Upson, F. W. See Albert, W. D., and Braekenbury, J. M.
- Upthegrove, C. See Rowland, E. S., and Siebert, C. A.
- Upton, G. B., habits and laws of decomposition of supercooled solutions, with special regard to austenite, B., 152.
- Upton, R. W. See Fink, L. M.
- Urano, N. See Shikata, M.
- Urazov, G. G., and Morozov, I. S., use of chlorine gas in non-ferrous metallurgy, B., 856.
- Urazovski, S. S., recovery of benzene from coal gas by means of active charcoals, B., 708.
- and Jakimkin, N. A., reactivity of gaseous nickel carbonyl, A., 941.
- and Scharaschenidze, S. S., connexion between adsorptivity and physico-chemical properties of substances, A., 1200.
- Urbach, E., and Kitamura, S., propeptan therapy, A., 1160.
- Urban, G., principles of co-ordination theory and some applications to organic chemistry, A., 727.
- Weiss, P., and Trombe, F., gadolinium, a new ferromagnetic metal, A., 1063.
- Urban, O. M., and Lewis, C. H., destruction of stability of emulsoids, (P.), B., 396. Purification of organically polluted water, (P.), B., 432. Removal of organic compounds from water solution; purification of phenolic liquors and recovery of values therefrom, (P.), B., 784.
- Urban, P., and Wada, M., sensitiveness of detection of alkali metals in arc spectrum, A., 185.
- Urban, F., Feldman, S., and White, Harvey L., a.c. and d.c. surface conductivity measurements in pyrex slits, A., 936.
- White, Harvey L., and Strassner, E. A., surface conductivity at solid-liquid interfaces, A., 705.
- See also Monaghan, B., and White, Harvey L.
- Urban, H. See Laszlo, D.
- Urban, K., improving the operation of the carbonatation scum presses, B., 1111.
- Urban, S. F., and Chipman, J., non-metallic inclusions in steel. I. Products of deoxidation, B., 634.
- Urban, W. See Schönberg, A.
- Urbanczyk, W. See Marchlewski, L.
- Urbanek, J., form and symmetry of the electromagnetic equations; equivalence of energy and mass, A., 1050.
- Urbanek, L. See under Urbányi, L.
- Urbański, T., solubility of cellulose nitrate, A., 292. Thermal analysis of binary mixtures of organic nitrates. II. and III., A., 302, 959. Determination of the brisance of explosives, B., 607.
- and Kwiatkowski, B., thermal analysis of the system picric acid-dinitro-naphthalene, A., 302.
- Urbański, T. See also Hackel, J., and Kołaczowska, M.
- Urbányi, L. See Marek, J.
- Ure, W. See Grantham, H. H.
- Urechia, C. I., Benetato, G., and Retezeanu, (Mme.), blood-potassium after extirpation of the adrenal glands, A., 1008.
- Pamfil, G., and Retezeanu, (Mme.), blood-manganese in some nerve diseases, A., 517.
- Urey, H. C., thermodynamic properties of hydrogen and deuterium, A., 925.
- and Grieff, L. J., isotopic exchange equilibria, A., 446.
- and Wahl, M. H., cascade electrolytic process for separating the hydrogen isotopes, A., 1329.
- See also Brickwedde, F. G., MacWood, G. E., Manian, S. H., Wahl, M. H., and Webster, L. A.
- Uritzaja, R. G. See Riss, I. G.
- Urizar, P. F. See Ratia, V. R. T.
- Urmánczy, A. See Kiss, A. von.
- Urondo, F. E., quantities of radioactive materials from radium and thorium emanations in air of Santa Fe, A., 1101.
- Urguhart, G. C., fire-extinguishing foam, (P.), B., 2.
- Urry, W. D., rare gases. III. Helium-neon content of the ocean waters, A., 724.
- Ursprung, A., osmotic quantities of plant cells in given phases, A., 904.
- Urusov, V. V. See Belopolski, A. P.
- Usachev, P. V. See Ipatiev, V. N.
- Usakiewicz, J. See Swientoslowski, W.
- Usanovitsch, M., diagrams for physico-chemical analysis of binary liquid systems, A., 693. Anomalous electrical conductivity, A., 825.
- Usatenko, J. I., determination of p_H of natural waters, A., 52.
- and Averkiev, N. D., graphical application of barometer corrections in volumetric determination of carbon, A., 506.
- Uschakov, M. I., and Galanov, A. S., argentometric determination of 2-thiobenzthiazole, A., 229.
- Lifschitz, S. S., and Jdanova, N. V., reduction of pyridine to piperidine in presence of nickel, A., 757.
- and Tchistov, V. O., salt-like properties of halogens; products of the action of bromine on silver salts, A., 857.
- Uschakova, A. See Stadnikov, G. L.
- Ushakov, S. N., and Konkova, V. A., synthesis of butylcellulose, B., 1135.
- Schneer, I. M., and Demina, E. N., decreasing viscosity of ethylcellulose, B., 1135.
- Usher, F. L., lyophilic behaviour and particle size, A., 821.
- Usines de Melle, extraction of products [already] in solution by means of [other] solvents, (P.), B., 1122.
- and Boinot, F., alcoholic fermentation of sugar-containing liquids, (P.), B., 203.
- Uslar, H. von. See Fischer, Hellmut.
- Uspanov, U. U., effect of gypsum on artificial solonetz, B., 164.
- Uspenskaja, T. A. See Tschernichov, J. A.
- Uspenski, E. E., soil microbiology in the U.S.S.R. (1917—1932), B., 164.
- and Kriutchkova, A. P., microbiological evaluation of soil-manurial requirement, B., 165.

- Uspenski, V. A. See Orlov, N. A.
- Ustiuchenko, V., preparing leather from the mucous stomach membrane of cattle, B., 817.
- Usui, T., relation between pituitary and lipin content of organs: relationship between pituitary and adrenaline content of the adrenals. I., A., 1397. Effects of phenanthrene derivatives on lipin contents of organs, A., 1411.
- Utaka, S., chlorination of wool, B., 986.
- Utescher, K., sea sludge from the Baltic and North Seas, B., 515.
See also Ganssen, R.
- Utevski, A., formation of acetaldhyde from lactic acid, A., 1531.
- Utheim-Toverud, K., iron store of newborn infants, A., 1263. Iron metabolism during pregnancy, A., 1270.
- Utterbach, C. L., and Williams, E. A., secondary electron emission from tantalum, A., 4.
See also Wirth, H. E.
- Uvalde Rock Asphalt Co. See Alvey, A. B.
- Uvarov, O. See King, N. S.
- Uvarova, A. V., and Kamlova, M. I., relation of exchangeable magnesium to physical properties of soils, B., 421.
See also Maslova, A. L.
- Uyeda, Y., Japanese dyeing tannins. XIV. Absorption of Korean "acer tannin" and commercial tannin by cellulose, B., 846.
- Uyeo, S. See Kondo, H.
- Uyldert, I. E., metabolism apparatus (pituitrin, histamine), A., 543.
- Uyterhoeven, W., and Verburg, C., periodic variation of concentration of neutral atoms in the vapour of an alternating-current sodium lamp, A., 1438.
- Uzdanska, S. See Szper, J.
- Uzel, R., complex compounds of mercuric cyanide, A., 945. Complex salts of mercury cyanide, A., 1469. α -Naphthoflavone as a reversible bromometric indicator, A., 1471.
- Uzumasa, Y., displacements of absorption bands of certain rare-earth salts: spectrographic detection of rare earths, A., 280.
and Miyake, Y., titration of adsorption indicators. IV. *o*-Cresolphthalein as an indicator in the argentometric titration of thiocyanates and halides, A., 53.
and Okuno, H., spectrographic analysis. II. Spectrum analysis of solutions, A., 52.
- V.
- Vacca, C. See Pepe, M.
- Vacca, G. N. See Ingmanson, J. H.
- Vach, S., sex hormones: preparation from the urine of pregnancy, A., 667.
- Vácha, K. See Jirovec, O.
- Vachon, A., Gagnon, P. E., and Kane, J., β -9-anthronyl- β -*m*-nitrophenylpropionic acid and its derivatives, A., 212.
- Vacuum Oil Co. See Fuller, E. W.
- Vadalà, L. See Ragno, M.
- Vaders, E., copper alloy for chill and die casting, (P.), B., 505.
- Vadova, F. A. See Sadikov, V. S.
- Vafiadi, V. G., Krivich, S. S., and Pokrovski, G. V., extreme infra-red spectrum of the sun, A., 908.
- Vagedes, K. von, sterilisation of drinking water by ultra-violet light, B., 384.
- Vagliano, M. See Livierato, S.
- Vagner, O. R. See Teis, E. V.
- Vagramjan, A. T. See Gorbunova, K. M.
- Vahlteich, H. W., and Best Foods, Inc., butter substitutes, (P.), B., 827.
- Vaid, V. R. See Ray, J. N.
- Vaidya, B. K., light filters for the mercury arc, A., 466.
- Vaidya, W. M., flame spectrum of ethylene, A., 279.
- Vaidyanathan, K. S. See Meldrum, A. N.
- Vail, J. G., silicate of soda in the building industry, B., 950.
- Vail, W. E. See Du Pont de Nemours & Co., E. I.
- Vaille, C., and Hautville, P., determination of blood-chlorine, A., 1142.
See also Hazard, R.
- Vaishya, B. L. See Chatterjee, B. K., and Govel, S. P.
- Vaisman, A. See Levaditi, C.
- Vajropala, K., guanine in the excreta of arachnids, A., 1148.
- Valaer, P. See Mallory, G. E.
- Valasek, J., effect of chemical combination on the $K\beta_1$ lines of sulphur, chlorine, and potassium, A., 1046. Infra-red absorption by Rochelle salt crystals, A., 1445.
- Valdiguie, P., acetone and β -hydroxybutyric acid content of the tissues after injection of acetone in healthy animals, A., 647.
- Valensi, G., oxidisability of nickel, A., 1328. Kinetics of the oxidation of metal filaments, A., 1466.
- Valenta, E. See Herasymenko, P.
- Valentin, F. See Votoček, E.
- Valentin Ord & Nagle, Ltd., and Nagle, J. C., packing of invert sugar, etc., (P.), B., 970.
- Valentine, E., and Reiner, L., action of sodium salicylate on fermentation of salicin and glucose by streptococci, A., 125.
- Valentine, G. M., spreadability of butter. I. Relation between rate of cooling cream and spreadability of butter, B., 475.
- Valentiner, S., and Becker, Gotthold, Housler alloys, A., 440. The system nickel-manganese, A., 576.
- Valenzuela, A. See Adriano, F. T.
- Valette, (Mlle.) S. See Charriou, A.
- Valiaschko, N. A., and Borisiuk, J. G., Ukrainian plant sources of technical materials. I. Tar, essential oil, and acids from Ukrainian lupulin, B., 933.
- Regiljant, R. O., Sergutina, M. M., and Sova, Z. V., determination of alkaloids in belladonna leaves, B., 748.
- Valier, (Mme.) P. See Wunschendorff, H.
- Valin, J. See Le Tourneur-Hugon.
- Valkó, E., diffusion of dyes, A., 299.
- Val'ko, N. S., *Apocynum sibiricum* culture, B., 245.
- Valla, S. See Terroine, E. F.
- Valladares, J. F. See Joshi, P. N.
- Vallarta, M. S. See Lemaitre, G.
- Valle, J. M. D. See Dreesen, W. C.
- Vallé-Jones, F. W., treatment of road surfaces, etc., (P.), B., 456.
- Valleau, W. D., probable case of sulphur starvation in tobacco, B., 691.
- Vallery-Radot, P., Mauric, G., and Hugo, A., opacification reaction and precipitins in the sensitised rabbit, A., 231. Opacification reaction in the serum of sensitised rabbits, A., 231.
- Mauric, G., Hugo, A., and Gauthier-Villars, P., modifications produced in rabbit serum by repeated bleeding, A., 641.
- Vallesi, E., effect of temperature on total iodine content of the thyroid, A., 511.
- Vallet, P., decomposition of substances at linearly increasing temperatures, A., 308.
- Valsö, J., hormone content of the pituitary of the blue whale (*Balaenoptera sibbaldi*), A., 1544.
- Valter, A. See Inge, L.
- Valvoline Oil Co. See Miller, C. A.
- Van Ackeren, J. See Koppers Co. of Delaware.
- Van Ackeren, P. See Koppers Co. of Delaware.
- Van Atta, L. C. See Van de Graaff, R. J.
- Van Auker, H. A. See Davenport, L. F.
- Van Beest, A. C. See Moerbeek, B. H.
- Vance, J. E., and Huffman, J. R., ultra-violet absorption band of Li_2 , A., 423.
See also Dixon, J. K., and Foote, H. W.
- Vancea, P. See Michail, D.
- Van Cleave, A. B., and Maass, O., molecular diameter of deuterium as determined by viscosity measurements, A., 432. Thermal conductivity of deuterium, A., 691. Variation of viscosity of gases with temperature over a large temperature range, A., 1455.
See also Grubb, A. C.
- Vandecaveye, S. C., and Allen, M. C., microbial activities in soil. II. Activity of specific groups of microbes in relation to organic matter transformation in Palouse silt loam, B., 1156.
See also Baker, G. O.
- Van de Graaff, R. J., Compton, K. T., and Van Atta, L. C., electrostatic generation of high voltages for nuclear investigations, A., 58.
- Vandegriff, J. N., Postel, C., and Internat. Bitumenoil Corp., apparatus for distilling carbonaceous material, (P.), B., 890.
- Vanderbilt, B. M. See Hass, H. B.
- Vanderbilt Co., Inc., R. T. See Alton, W. H., Kidwell, C. H., and Sproat, I. E.
- Vanderwaeren, J. See Decoux, L.
- Vanderwal, R. J. See Gilman, H.
- Vanderwilt, J. W., revision of structure and stratigraphy of the Aspen district, Colorado, and its bearing on the ore deposits, A., 955.
- Vande Velde, A. J. J., sterilisation of biological powders. V. Sterilisation of arable soil, B., 323. Soils containing urea, B., 602. Preservation of fish intended for chemical investigation, B., 1116.
- Vandewyer, R., ethylenic nitriles, A., 1228.
- Vandoni, R., and Desseigne, G., volumetric determination of camphor by the hydroxylamine method, A., 1516.
- Van Duzee, E. M., and Adkins, H., hydrogenation and hydrogenolysis of ethers, A., 483.
- Van Dyck, W. J. D. See Boerlage, G. D.
- Van Gessel, K. M., Wijk, W. D. van, and Radio Corp. of America, electric-discharge tube, (P.), B., 30.
See also under Gessel, K. M. van.
- Vanghelovici, M., structure of cholesterol, A., 81.
and Angelescu, B. N., structure of sitosterol, A., 1493.
See also Minovici, S.
- Vanhems, G. See Leulier, A.
- Van Heurn, F. C., and Patent & Licensing Corp., rubber flooring, etc., (P.), B., 1105.
- Vanino, L., luminous pigments, B., 913.
- Van Kreveld, A., graininess and resolving power of photographic emulsions, B., 175.

- Vannotti, F. See Fierz-David, H. E.
- Van Nuys, C. C., and Air Reduction Co., Inc., apparatus for separating constituents of gaseous mixtures, (P.), B., 85. Separating constituents of gaseous mixtures, (P.), B., 290.
- Vanoli, G. See Eggs, F.
- Van Schaack, R. H., jun., and Van Schaack Bros. Chem. Works, [preparation and use of] esters of sec.-alcohols, (P.), B., 13.
- Van Schaack Bros. Chemical Works, Inc. See Holter, W. L., Schalch, J., and Van Schaack, R. H., jun.
- Vanscheidt, A. A., fluorene and triphenylmethane. XIII. Alcoholic potassium hydroxide as a reagent for fluorene hydrocarbons with a labile hydrogen atom, A., 74.
- and Kaganova, E. M., production of alcohol from ethylene by catalytic hydration, B., 395.
- Vanselow, W. See Eastman Kodak Co.
- Van Slyke, D. D., physical chemistry of blood, A., 230. Acid-base equilibrium and the Henderson formula, A., 1326.
- Rhoads, C. P., Hiller, A., and Alving, A. S., relationship of the urea clearance to the renal blood-flow, A., 774. See also Alving, A. S.
- Van Suchtelen, E. F., production of reduced particle size from spray-solidified powder-like or granular materials, (P.), B., 50.
- Vantine, J. T. See Reynolds, E. B.
- Van Vleck, J. H., perturbations due to spin-orbit forces in carbon monoxide and other band spectra, A., 9. Magnetic dipole radiation and atmospheric absorption bands of oxygen, A., 136. Rotational energy of polyatomic molecules, A., 570. Cross-section of heavy nuclei for slow neutrons, A., 1296. Tensor nature of the dielectric constant and magnetic permeability in anisotropic media, A., 1304.
- and Hebb, M. H., paramagnetic rotation of tysonite, A., 149.
- Van Vlodrop, C. See Waterman, H. I.
- Van Voorhis, S. N., Kuper, J. B. H., and Harnwell, G. P., proton source for atomic disintegration experiments, A., 1441.
- See also Harnwell, G. P.
- Van Voorst, F. T., rapid determination of common salt in mustard, B., 1020.
- Van Winkle, J. R. See Jurist, A. E.
- Van Winkle, R. See Christiansen, W. G.
- Vanzetti, B. L., sugar charcoal. I. Grain structure of sugar charcoal. II. Sugar charcoal as irreversible colloid. III., A., 808, 1069.
- Vanzetti, G. See Sirovich, G.
- Vapor Treating Processes, Inc. See Loomis, J. H.
- Varadachari, P. S., influence of formation of hydrates on diamagnetism of chemical compounds, A., 1311.
- See also Rao, S. R.
- Varadhan, C., and Rao, K. A. N., preservation of wood. I. Treatment with creosote-water emulsion, B., 806.
- Varay, A. See Loeper, M.
- Varcoe, R. J., fine or colloidal clay, (P.), B., 455.
- Varela-Fuentès, B., and Munilla, A., bilirubin in the serum of vertebrates, A., 103.
- Varela-Fuentès, B., and Recarte, P., colloidal solution of acid bilirubin; preparation and properties, A., 235.
- Rubino, M. C., and Viana, C., nature of the ether-extractable indirect bilirubin of icteric sera, A., 776.
- and Viana, C., [direct and indirect] bilirubin in catarrhal icterus, A., 650. Ether-extractable indirect bilirubin in icteric sera, A., 776.
- Viana, C., and Recarte, P., indirect bilirubin of serum and its extraction by chloroform; techniques proposed by de Castro, and by Kerpola and Leikola, A., 230.
- Varfolomeen, I. V., determination of [base]-absorbing capacity of soil, B., 71.
- Varfolomeeva, P. E. See Bruevitsch, S. V.
- Varga, F. B., and Newton, R. H., sampling and analysis of entrained matter in [combustible] gases, B., 835.
- Varga, G. See Chrétien, A.
- Vargha, L. von, constitution of benzylidene-*d*-sorbitol. I. Synthesis of *l*-xylose. II. *p*-Toluenesulphonyl and anhydro-derivatives of *d*-sorbitol, A., 325, 1104.
- Vargoz, J. See Guitonneau, G.
- Varian, R. H., barrier layer cells, A., 147.
- Varicák, B. See Dragišić, B.
- Varma, B. S. See Krishna, S.
- Varma, L. P., determination of absorption coefficients of sound for different materials, A., 1219.
- Varma, P. S., Godbole, N. N., and Gangadharan, A., oil from seeds of *Sarcostigma Kleinii*. I, B., 732.
- and Raman, K. S. V., halogenation. X. Preparation of mixed halogen derivatives of xylenes. X. Iodination of xylenes and iodoxylenes, A., 1114, 1229. Nitration. V. Nitration of monohalogenated derivatives of xylenes, A., 1487.
- Varney, P. L., device for aerating and circulating aquarium water, A., 1219.
- Varney, R. N., ionisation of inert gases by positive alkali ions, A., 556.
- Varney, T., electrical reduction of ores, (P.), B., 638.
- Vars, H. M., and Paffner, J. J., vitamin-C and the adrenal gland in dogs, A., 262.
- See also Swingle, W. W.
- Vartanian, R. D. See Thomas, Arthur W.
- Vertiainen, A., does vagus stimulation cause an increase in acetylcholine content of heart muscle? A., 116. Action of certain new histamine derivatives, A., 1156. Action of ergoclavine and sensibamine, A., 1157.
- Varvoglis, G. See Wieland, H.
- Vašátko, J., coagulation of beet juices; acid range. I. The optimum coagulation. II. Peptisation of the coagulate. III. Acid addition and progressive coagulation. IV. and V. Basic range, B., 75, 200, 1111.
- See also Pázler, J.
- Vašiček, A., electro-osmosis with some ceramic diaphragms, A., 1458.
- See also Velíšek, J.
- Vasilchakova, V. F. See Khisin, Y. I.
- Vasilenko, M. I. See Sagaidatschni, A. F., and Skirstimonski, A. O.
- Vasilenko, V. C., and Jevtuchova, M. L., carbohydrate metabolism in circulatory insufficiency, A., 1008.
- Vasileva, L. A., formula of sodium antimonate, A., 1470.
- Vasiliadis, C., method for leaching adsorbed sodium from the soil complex by means of steam, B., 36.
- Vasiliev, A. M., apparatus for decomposition of [mineral] specimens without admitting air, A., 1341. D. I. Mendeleev's elements "X" and "Y" in the light of new ideas, A., 1440.
- Vasiliev, B. B. See Achumov, E. I., Portnov, M. A., and Voinilovitsch, G. I.
- Vasiliev, S. S., Frolov, M. V., Kaschtanov, L. I., and Kastorskaja, T. L., chain process in the reaction between SO₂ and O₂. I. Oxidation of aqueous SO₂ by ozone, A., 938.
- See also Kobosev, N. I.
- Vasiliev, V. S., mineralisation of water in the R. Sakma basin (Pugatshev province, Lower Volga region), A., 1099.
- Vasiliev, Z. V., Maschovetz, V. P., Popov, B. V., and Taitz, A. J., large-scale laboratory experiments for making calcium, A., 1330.
- Vasilieva, Z. A. See Karavaev, N. M.
- Vasiliiu, C. See Băltăceanu, G.
- Vasneva, K. I. See Kireev, V. A.
- Vásquez, E. N., hypophysin and gastric acidity, A., 667.
- Vásquez, N. F., relation between ammonia content and reaction of soils, B., 687.
- Vásquez, S. See Feigl, F.
- Vasser, E., velocity distribution of photoelectrons in thin metal foils, A., 139. External photo-electric effect in cuprous oxide, A., 1055. Distribution of velocities of photo-electrons in thin metallic films (Al), A., 1293.
- Vasserberg, I. G. See Berditschevski, L. G.
- Vasserman, E. S., new indicators for acidimetry, A., 52.
- and Suprunovitsch, I. B., application of diphenylcarbazone to determination of metals, A., 950.
- Vassiliadis, H. See Maisin, J.
- Vassiliev, G., acid-producing power as a means of characterising strains of *Aspergillus niger*, A., 1027.
- Vassiliev, I. M., yarrowisation of winter varieties [of wheat] and frost-resistance, B., 199.
- and Vassilieva, N. G., changes in the carbohydrate content of wheat during hardening against drought, A., 796.
- Vassiliev, K. V. See Vesselovski, V. S.
- Vassiliev, V., Syrkin, J., and Kenez, I., dipole moment of iodine, A., 283.
- See also Syrkin, J.
- Vassilieva, N. G. See Vassiliev, I. M.
- Vassiliou, A., detection of traces of iodides in presence of chlorates, bromates, and iodates, A., 52. Rapid detection and determination of iodates in presence of bromates and chlorates, A., 53.
- Vassy, E. See Barbier, D.
- Vastagh, G., assay of preparations of sodium salts of bile acids, B., 477.
- Vaubel, R. See Strohecker, R.
- Vaudet, G., and Servant, R., spectra of exploded filaments in the far ultraviolet and Schumann regions, A., 1045.
- Vaughan, A. L. See Tate, J. T.
- Vaughan, S. L., and Hubbard, R. S., van den Bergh reaction of bilirubin in xanthochromic cerebrospinal fluid, A., 1005.
- Vaughan, W., and Permutit Co., [zeolite] gels, (P.), B., 226.
- Vaughan, W. E. See Kistiakowski, G. B., and Smith, Hilton A.

- Vaughan, W. H., test data on stiff-mud refractories made from Georgia sedimentary kaolins, using void control, B., 992.
- Vaughan-Jackson, M. W. See Bell, R. P.
- Vaughn, T. H., Vogt, R. R., and Nieuwland, J. A., preparation of ethers in liquid ammonia, A., 605.
- Vaulont, H., comparative investigations of blood. VII. Cat and horse, A., 642.
- Vaupel, E. A. See Barackman, R. A.
- Vaupel, O. See Berthold, R.
- Vavon, G., and Horeau, A., ethyl cyclopentanone-2-carboxylate and *cis*- and *trans*-2-ethylcyclopentanol, A., 342.
- Vazquez, E. A., organic product [resin] obtained from molasses and molasses residues, (P.), B., 915.
- Vázquez-Sánchez, J., Spanish carob bean, B., 779.
- Veal, F. J. See Garner, W. E.
- Věbra, J. See Brus, G.
- Vecsey, T. See Bodnár, J.
- Venceva, N., and Grum-Grshimailo, S., spectro-polariscopic method of Oumov applied to microscopic examination of minerals, A., 58.
- Vedenskaja, E. E. See Drinberg, A.
- Vedenski, A. A., and Ivannikov, P. J., chemical equilibrium between hydrocarbons. VIII. Equilibria of the reactions $C_6H_{14} \rightleftharpoons C_6H_{12} + H_2$; $C_8H_{18} \rightleftharpoons C_8H_{16} + H_2$, A., 165.
- See also Altschudshan, A. A.
- Vedjernikova, E. I. See Golub, V. P.
- Veen, A. G. van, and Hyman, A. J., djenkolic acid, a new amino-acid containing sulphur, A., 966.
- and Mertens, W. K., effect of bongkrekic acid on carbohydrate metabolism, A., 1540.
- Veenemans, C. F. See De Boer, J. H.
- Vegard, L., auroral spectrum and its interpretation, A., 3. Luminescence from solidified gases and its interpretation, A., 12. Luminescence and crystal structure of solidified gases, A., 147. Phosphorescence process as revealed by the luminescence from solid nitrogen, A., 914. Structure of solid oxygen, A., 1450.
- and Kloster, A., copper-gold alloys, especially at high temperatures, A., 291.
- and Tönsberg, E., night light and Northern lights in the long-wave spectral region, A., 800.
- Vegh, P., blood-chloride after administration of sodium chloride in subjects with healthy or diseased liver, A., 516.
- See also Paul, B.
- Veil, (Mlle.) S., autophotographic location of radioactive ions in gelatin, A., 178. Precipitation of zinc salts by alkali metal chromates in a gelatin medium; discrimination of zinc and cadmium, A., 186. Gelatin deformed in an electric field, A., 445. Electrolytic phenomena related to chemical associations in gelatin, A., 822. Response of electrolytes in gelatin to an applied electric field, A., 1075. Contact cells and their short-circuiting, A., 1079. E.m.f. due to the combination of metal [electrodes] in gelatin and the importance of the Volta effect in cells, A., 1462.
- Veisbrut, L. A. See Schulikov, J. I.
- Veissbruth, L. See Cherskova, E.
- Veit, E. See Slatineanu, A.
- Veit, F., distribution of therapeutic substances in various parts of the central nervous system and their micro-determination in tissues. III. *apo*Morphine and bulbo-capsine. IV. Strychnine, A., 1018.
- and Vogt, M., distribution of therapeutic substances in various parts of the central nervous system and their micro-determination in tissues. I. Scopamine and atropine, A., 1018.
- See also Mannich, C.
- Velasco, J. R., relationships between affinity and velocity of reaction, A., 709.
- Velculescu, A. J. See Atanasiu, J. A.
- Velde, H. See Tramm, H.
- Veldkamp, J., fine structure of *L*-edges in the X-ray absorption spectra of the elements tantalum, tungsten, platinum, and gold, A., 272.
- Veldman, A. R. See Waterman, H. I.
- Velento, J., macro- and micro-scopical differentiation of commonly occurring kinds of *Strophanthus* seeds, B., 1164.
- Veler, C. D. See Doisy, E. A.
- Veletzka, O., viscosity bands in magnetic spectra, A., 1310.
- Velikovskaja, E., utilisation of waste products of the petroleum industry, B., 885.
- Velikovski, A. S., and Hofman, P. S., Chimion crude oil (eastern parcel, Sand "M," well no. 47), B., 1029.
- and Pavlova, S. N., Shubar-Kuduk crude oil (Emba); Tamduikul crude oil; Sagiz crude oil, B., 1029. Turkmenian crude oils; Neftedag crude oil (lower part of the Apscheron horizon); Neftedag crude oil from well no. 13 (upper "red" sand layer); Chelékenui crude oils; Okha (Sakhalin) crude oil, B., 1029. Crude oils from non-Caucasian deposits, B., 1029.
- and Poznyak, I. V., application of the Edelcanu method in refining of lubricating oil distillates from heavy Binagadi crude oil, B., 7.
- Velíšek, J., and Vašíček, A., does electrokinetic potential measured by the electro-osmotic method with ceramic diaphragms vary with the current strength? A., 162. Electro-osmosis at certain porcelain diaphragms, A., 1317. Studies on structure of ceramic diaphragms by means of electrical measurements, B., 545.
- Velitshkovski, A. V. See Pletnik, I. I.
- Vellard, J., and Miguelote-Vianna, M., blood changes following snake-venom treatment of cancer, A., 236. Variations in alkaline reserve during ophidian intoxication, A., 398. Blood changes caused by ophidian venoms. III. Variations in alkaline reserve, A., 1158.
- Vellinger, E., use of antimony electrode for p_H determination and acidimetric titration in aqueous or organic solutions, A., 1091. Interfacial tension measurements in the petroleum industry, B., 933.
- and Radulesco, G., use of cracked spirit in motors, B., 710.
- Velluz, J. See Velluz, L.
- Velluz, L., diphtheritic ψ -globulin and toxin-antitoxin flocculate, A., 536. Preparation of cryptotoxic agents from inactive compounds, particularly aminoacids, A., 656. Chemical constitution and antitoxic activity (*in vitro*) of some organic molecules, A., 1020.
- Velluz, L., comparative action of the bile acids on tetanus and diphtheria toxins; special properties of lithocholic acid, A., 1395.
- and Velluz, J., variations in serum magnesium, A., 104.
- Velsical Corporation. See Hyman, J.
- Velten, H. See Schramek, W.
- Veltistova, M. V., Dolgov, B. N., and Karpov, A. Z., synthesis of methyl alcohol from water-gas under pressure, B., 12.
- See also Dolgov, B. N.
- Veltman, the Uchte moorland; development and possibilities of utilising a recent north-west German high-moor, B., 1107.
- Velz, C. J., influence of temperature on coagulation [in water purification], B., 432.
- Venable, H. G., preparation of products for preventing and removing incrustation and corrosion of boilers, etc., (P.), B., 482.
- Vénar, Y., and Todd, T. W., efficacy of vitamin-D administration in aqueous preparations, A., 670.
- Vendég, V., nature of the action of insulin, A., 1422.
- Vendl, M. See Romwalter, A.
- Vener, I. M. See Kondratiev, E. V.
- Venesta, Ltd., and Love, A., rolling or crushing mills, (P.), B., 1074.
- Vengerova, V. J., Brutzkus, E. B., and Palmer, E. V., continuous control of precipitate and ammophos production, B., 402.
- See also Jofa, Z. A.
- Venitzkovski, V. A., ammonium nitrate explosives in underground work, B., 575.
- Venkatachalam, K., and Ratnagiriswaran, A. N., action of anterior pituitary extract and its effect on blood-sugar, A., 1423.
- See also Ratnagiriswaran, A. N.
- Venkataraman, K. See Bhalla, D. C., Gulati, K. C., Karrer, W., Mahal, H. S., and Ratnagiriswaran, A. N.
- Venkataramiah, H. S., influence of a magnetic field on the coefficient of viscosity of liquids, A., 1455.
- Venkatarayan, S. V., are sprayed grapes poisonous? B., 78.
- Venkatasubban, A. See Dastur, N. N.
- Venkatesachar, B., platinum isotopes and their nuclear spin, A., 1185.
- and Sibaiya, L., isotope abundance in platinum, A., 1185. Iridium isotopes and their nuclear spin, A., 1295.
- Venkateswaran, C. S., Raman spectra of some metallic halides, A., 1053. Raman spectra of iodic acid and the alkaline iodates as solids and solutions, A., 1301. Raman spectrum of phosphorus, A., 1445. Raman spectra of dioxan and tetralin, A., 1446.
- Ventrella, L., electric batteries, (P.), B., 462. [Ribbed accumulator plates for] electric batteries, (P.), B., 508.
- Venugopalan, M., and Aldis, R. W., dispersing "polymerised" shellac, B., 33.
- Venus-Danilova, E. D., condensation of acraldehyde with cyclohexyl and aromatic rings, A., 83.
- Vepa, V. L. R., potential of dry cells with magnesium chloride electrolyte, B., 461.
- Verain, M. See Toussaint, G.
- Verbeek, H. See Fuchs, W.

- Verbeek, *H. P. J.*, trichromatic colorimeter, A., 58.
and Bazen, *M. L.*, distribution of chief colours in the spectrum, A., 676.
- Verberg, *G.* See De Jong, *H. G. B.*
- Verburg, *C.* See Uytendoeven, *W.*
- Vercellone, *A.*, phytochemical reduction of anthraquinone, A., 1165.
and Neuberg, *C.*, preparation of *d*(-)-3-phosphoglyceric acid, A., 1418.
See also Neuberg, *C.*, and Schuchardt, *W.*
- Vercesi, *C.*, and Guercio, *F.*, behaviour of serum in malign tumours, pregnancy, and gynaecological diseases, A., 1269.
- Verchovskaja, *V.* See Chmelnitzkaja, *I.*
- Vercillo, *A.*, determination of sugars in flour and bread, B., 1113.
- Verdié, *H.*, Siloret, *G.*, and De Ferrière, *J. F.*, soils of lower Charente; relations between pedology and local designations, A., 191.
- Verdino, *A.*, and Schadendorff, *E.*, condensation of aromatic amines with cholesteryl chloroformate, A., 209. Condensation of ethyl chloroformylcholate with amines and phenols, A., 1366.
See also Schadendorff, *E.*
- Verein für Chemische & Metallurgische Produktion, preparation and roasting of [fine] sulphide ores [e.g., flotation concentrates], (P.), B., 955.
- Vereinigte Deutsche Metallwerke Akt.-Ges. Zweigniederlassung Hedderheimer Kupferwerk, [homogenising] treatment of copper-tin alloys, (P.), B., 556.
- Verein. Glanzstoff-Fabriken Akt.-Ges., [rollers for] manufacture of artificial silk, (P.), B., 267. Wet treatment and drying of freshly spun artificial silk threads, (P.), B., 300. Desulphurisation of viscose artificial silk, (P.), B., 897.
- Verein. Glühlampen & Elektrizitäts Akt.-Ges., obtaining constituents of the atmosphere, (P.), B., 1142. Obtaining rare gases with a higher b.p. than oxygen, (P.), B., 1142.
- Verein. Leichtmetallwerke G.m.b.H., treatment of aluminium-magnesium alloys [to increase their corrosion-resistance], (P.), B., 557. Aluminium alloys, (P.), B., 1000.
- Verein. Stahlwerk Akt.-Ges., [steel] articles or work-pieces of wear-resisting surface and tough core, (P.), B., 155. Removal of rust from, and pickling, iron and steel, (P.), B., 155. Prolonging life of pressing, drawing, stamping, and similar tools, (P.), B., 235. Treating steel, alloy steel, copper, or brass before cold-working, (P.), B., 235. Corrosion-resisting steel and iron alloys, (P.), B., 504.
- Verhoeck, *F. H.*, decomposition of acetaldehyde catalysed by nitrous oxide, A., 1466. Decomposition of chloral catalysed by nitric oxide, A., 1466. Decomposition of acetaldehyde catalysed by nitric oxide, A., 1466.
- Verigin, *V. N.*, production of aluminium-silicon alloys by the Dnieper Aluminium Combine, B., 1049.
- Verigina, *K. V.* See Remezov, *N. P.*
- Verigo, *A. B.*, determination of radium emanation in the atmosphere, A., 54.
- Verity, *M. F.*, and Massey-Harris Co., Ltd., heat treatment of metal [steel] articles, (P.), B., 857.
- Verkade, *P. E.*, and De Willigen, *A. H. A.*, velocity of saponification of some simple triglycerides by ethyl-alcoholic potash, A., 709.
- Verkade, *P. E.*, and Lee, *J. van der*, fat metabolism. V. Degradation of unsaturated fatty acids in the living organism, A., 242, 390. Synthesis of glycerides. I., A., 326.
Lee, *J. van der*, and Holwerda, *K.*, fat metabolism. VI. α -Lauro- β -diundecoin, A., 1273.
Lee, *J. van der*, and Meerburg, (*Miss*) *W.*, synthesis of glycerides by means of triphenylmethyl compounds. I. Mono-acid diglycerides, A., 1481.
- Verleger, *H.* See Herzberg, *G.*
- Verley, *A.*, synthesis of Tiemann's iron, A., 979.
- Verma, *J. D.* See Jainik, *N. A.*
- Verma, *M. R.*, and Gupta, *I. C.*, diamagnetism of elements in the powdered state, A., 1063.
See also Bhatnagar, *S. S.*, and Kapur, *P. L.*
- Verman, *L. C.*, industrial possibilities of pure lac resin, B., 465. Fundamental physical properties of lac. I. Mechanical properties. II. Thermal properties, B., 914, 1004.
and Bhattacharya, *R.*, isolation of pure lac resin, B., 417. Direct liquid-extraction process for pure lac resin, B., 1004.
- Vermel, *E. M.*, and Mitzkevitch, *M. S.*, action of hormones on growth of cell cultures, A., 668.
- Vernadski, *V. I.*, problems of radio-geology, A., 1099.
- Vernazza, *E.*, decomposition of nitrates and nitrites of metals having various valencies. IV. Vanadyl nitrate, A., 174.
- Verne, *J.*, and Sannié, *C.*, action of metallic chlorides on tissue cultures. II. Hepatic, renal, and nerve tissue, A., 1021.
- Verner, *L.*, effects of nitrate fertilisation on apple fruits, B., 422.
- Vernier, *C.* See André, *E.*
- Vernon, *C. C.*, Struss, *E. F.*, O'Neil, *M. A.*, and Ford, *M. A.*, xenyl esters and ethers, A., 614.
- Vernon, *H.* See Gibbons Bros.
- Vernon, *W. H. J.*, basic copper carbonate and green patina, A., 49.
- Vero, *E.* See Walker, *T. K.*
- Verö, *J.*, effect of β -crystals on properties of 63:37 brass, B., 27.
- Véron, *D.*, and Short Milling Co., *J. R.*, bean flour, (P.), B., 285.
- Verona, *O.*, microbiology of soils of Italian Somaliland, B., 687.
- Verona, *R.*, behaviour of motor spirit towards sulphuric acid and determination of individual hydrocarbon groups, B., 710.
- Versehaelt, *J. E.*, dependence of vapour pressure on temperature above critical point, A., 157.
- Versé, *G.*, elastic properties of steel at high temperatures, B., 549.
- Vershbinskaja, *N.* See Borsuk, *V.*
- Vershbovskaja, *A.* See Andreev, *V.*
- Verstraete, *E. O. K.*, molecular size of crystalline carbon tetrachloride and tetrabromide, and of ethylene dichloride and dibromide, A., 156.
- Vertzman, *J. L.*, control of quality of galvanostegic zinc plating, B., 65.
- Verver, *C. G.*, Höppler viscosimeter versus Vogel-Ossag viscosimeter, A., 1342.
- Verweel, *H. J.* See Bijvoet, *J. M.*
- Verwey, *E. J. W.*, interchange of adsorbed ions, A., 160. Ion adsorption and exchange, A., 1200. Incomplete atomic arrangement in crystals, A., 1307. Crystal structure of γ -Fe₂O₃ and γ -Al₂O₃, A., 1450.
- Verwey, *M. G.* See Maas, *C. F. H.*
- Verwey, *S.* See Pannekoek, *A.*
- Verzár, *F.*, rôle of diffusion and membrane activity in the absorption of various sugars from the intestine, A., 522.
and Laszt, *L.*, absorption from the intestine of isotonic solutions of glucose and sorbose in comparison with sodium sulphate, A., 522. Inhibition by phloridzin of fat absorption, A., 524. Inhibition of fat absorption after extirpation of the adrenals, A., 524. Adrenal cortex and resorption of fat, A., 1031.
- Süllmann, *H.*, and Vischer, *A.*, differentiation of pigments of human blood-serum, A., 103.
See also McDougall, *E. J.*
- Verzhbitskaja, *B. F.* See Tuchovitzki, *N. V.*
- Vesely, *V.*, Medvedeva, *A.*, and Müller, *E.*, naphthindazoles, A., 991. Naphthopyrazoles (benzindazoles), A., 1508.
- Vesselkina, *V. M.* See Iljin, *V. S.*
- Vesselovski, *O.* See Zunz, *E.*
- Vesselovski, *V. S.*, and Selajev, *I. A.*, influence of surface tension of the intermicellar liquid on the structure formation of silica gel, A., 1200.
and Vassiliev, *K. V.*, X-ray investigation of disperse structure of different kinds of graphite, A., 17. Twin formation in graphite, A., 285.
- Vestin, *R.* See Euler, *H. von*.
- Vézi, *G.*, results of new examinations on structure of organic molecules, A., 806.
- Vetter, *H.* See Kuhn, *R.*, and Winterstein, *A.*
- Vetter, *K. E.* See Agde, *G.*
- Vexler, *V.* See Umanski, *J.*
- Viale, *G.*, nature and determination of vitamin-C, A., 416.
and Crocetta, *A.*, hæmatic glycolysis *in vitro* in diabetes mellitus. I. Action of cortin, A., 1269.
- Vialov, *O. S.* See Simakov, *S. N.*
- Viana, *C.* See Varela-Fuente, *B.*
- Vibe, *A.* See Kurtshatov, *I. V.*
- Vicens-Rios, *C.* See Tweedy, *W. R.*
- Viek, *F. A.* See Johnson, *M. C.*
- Vickers, *A. E. J.*, and Bell, *R. A.*, apparatus for investigating corrosive action of slags on refractory materials, B., 851.
- Vickers, *C.*, magnesium-chromium as a deoxidiser of copper, B., 152.
- Vickers, *J. B.* See Andrew, *J. H.*
- Vickerstaff, *P.* See Spring, *F. S.*
- Vickery, *H. B.*, Pucher, *G. W.*, and Clark, *H. E.*, glutamine in tomato plant, A., 134. Preparation of glutamine, A., 850.
See also Pucher, *G. W.*
- Victor, *E.* See Brauer, *G.*
- Victor, *J.*, and Wintersteiner, *M. R.*, mouse leucæmia. X. Metabolic differences between transmission lines of mouse lymphatic leucæmia, A., 1008.
- Victor Chemical Works, purification of phosphoric acid, (P.), B., 146.
See also Adler, *H.*, Knox, *W. H.*, jun., Kochs, *H. W.*, and Zinn, *R. E.*
- Vidal, *Brot*, and Aribert, use of the wood of *Pinus insignis* for papermaking, B., 1039.

- Vidal de Cárcer, *M.* See Oriol, *A.*
- Videla, *C. A.*, Savino, *E.*, and Dalke, *L. M.*, Henry's reaction (iron flocculation), *A.*, 1402.
- Viehl, *K.*, determination of sulphide-sulphur, especially in effluents, *B.*, 176. [with Meissner, *B.*], influence of temperature and seasons on biological purification of sewage, *B.*, 207.
- Viehoever, *A.*, evaluation of aloe, *B.*, 478.
- Vieille, lowering the tempering temperature of powder BM-D₂, *B.*, 831. Test for stability of powder B and of cotton powders by determining the resistance to heating at 110°, *B.*, 831. Influence of temperature and of relative humidity on the moisture content of powder B, *B.*, 831.
- Vieles, *P.*, dilactic [oxidodi- α' -propionic] acids, *A.*, 474.
- Vielhaber, replacement of borax [in enamels] by sodium phosphate, *B.*, 591. Effect of milling admixtures on the m.p. of enamel, *B.*, 591. Borax-free enamels, *B.*, 674. Borax-free ground [ing enamel], *B.*, 674. "Fish eyes" in [enamel], *B.*, 850.
- Vielh, *O.* See Feremutsch, *P.*
- Vierling, *O.* See Mecke, *R.*
- Viertel, *O.*, chlorination and damaging of wool, *B.*, 766.
- See also Schramek, *W.*
- Vieweg, *H. F.*, particle-size distribution in some ground ceramic raw materials, *B.*, 356.
- Viganò, *C.* See Corbellini, *A.*
- Vigdorichik, *I. M.* See Slutskii, *A. A.*
- Vigfusson, *V. A.*, Bates, *G. N.*, and Thorvaldson, *T.*, hydrothermal synthesis of calcium hydrosilicates, *A.*, 50.
- Vigiliani, *E.*, spectrophotometric methods for determining porphyrins, *A.*, 1552.
- Vigness, *J.*, dilatations in Rochelle salt, *A.*, 1195.
- Vigni, *R.* See Belluerci, *I.*
- Vignola, *T.* See Gandini, *A.*
- Vignolo, *V.* See Garino, *M.*
- Viktorin, *O.* See Audubert, *R.*
- Vilar, *J.*, Munilla, *A.*, and Silveira, *J.*, effect of hormones on reduced glutathione in tissues and blood, *A.*, 540.
- Vilbrandt, *P. C.* See Bludworth, *J. E.*
- Vilenski, *D.*, influence of moisture content of soils on their structure, *B.*, 243.
- Vilamovich, *E. T.* See Lapin, *N. P.*
- Villamil, *F. A.* See Bonnet, *J. A.*
- Villaret, *M.*, Justin-Besançon, *L.*, and Drillon, *M.*, solubility of cholesterol in certain acyclic amines, *A.*, 1235.
- Villemaire, *F.* See Diénert, *F.*
- Villette, *H.* See Lecoq, *R.*
- Villey, *J.*, classification of energy losses according to types of irreversibility, *A.*, 815. Calculation of energy loss in combustion, *A.*, 1080.
- Vinal, *G. W.*, and Craig, *D. N.*, resistivity of sulphuric acid solutions and its relation to viscosity and temperature, *A.*, 169. Chemical reactions in the lead storage battery, *B.*, 773.
- Craig, *D. N.*, and Brickwedde, *L. H.*, standards of c.m.f., *A.*, 1340.
- Vinais, *E.* See Lipschütz, *A.*
- Vincent, *H.*, and Dietrie, *J.*, toxicity of some esters of diethylaminoethyl alcohol, *A.*, 116.
- Vincent, *J. R.* See Bartlett, *P. D.*
- Vincent, *V.*, Herviaux, *J.*, and Sarazin, growth of high-yielding forage beet, *B.*, 199.
- Vincke, *E.*, determination of copper in plating baths by the de Haen-Low method, *B.*, 413. [Polygonal] threads of india-rubber, gutta-percha, etc., (*P.*), *B.*, 280.
- See also Oelkers, *H. A.*
- Vinet, *E.*, mineral nutrition of the vine: comparative efficiency of some nitrogenous fertilisers, *B.*, 471. Mineral nutrition of the vine: effects of manures on production and quality, *B.*, 471.
- Vinetzkaia, *E. Y.*, hydration of gelatin and collagen, *B.*, 420.
- Vinkler, *E.* See Bruckner, *V.*
- Vinogradov, *A.*, preventing ship fires, *B.*, 102.
- Vinogradov, *A. P.*, biogenic migration of rare elements, *A.*, 1478.
- Vinogradov, *A. V.*, direct titration of barium salts with potassium chromate in presence of rosolic acid as indicator; application to determination of sulphates, especially of sulphur in pyrites and slags, *A.*, 1473.
- and Ostroumov, *E. A.*, determination of propionic and butyric acids in acetic acid, *B.*, 839.
- Vinogradova, *O.* See Karassik, *V. M.*
- Vinogradsova, *D.* See Dubský, *J. V.*
- Vintilescu, *J.*, and Ionescu, *C. N.*, biochemical synthesis of β -cyclopentyl- and β -cyclohexyl-glucosides, *A.*, 609.
- Ionescu, *C. N.*, and Kizyk, *A.*, application of the law of mass action to the synthesis of β -glucosides, *A.*, 1485. Enzymic synthesis of α -glucosides, *A.*, 1485.
- Vinz, *W.*, comparative works trials of different types of sterilising filters, *B.*, 209.
- Violle, *H.*, action of sodium ricinoleate on various micro-organisms, *A.*, 665.
- Violle, *P. L.* See Labbé, *M.*
- Viollier, *R.*, and Iselin, *E.*, iodised eggs, *B.*, 825.
- Virginia-Carolina Chemical Corporation. See Genz, *F. W.*
- Virginia Smelting Co. See Binns, *F. W.*
- Virobiantz, *R. A.*, and Gabrieliantz, *S. M.*, separation of normal methane hydrocarbons from straight-run gasolines, *B.*, 133.
- Virski, *J. P.* See Skljarenko, *S. I.*
- Virtala, *V.*, apparatus for measuring fire-resistance of impregnated wood, *B.*, 548.
- Virtanen, *A. I.*, enzymes of bacteria and bacterial metabolism, *A.*, 256. Root nodule bacteria of leguminous plants. XVI. Effect of air content of the medium on the function of the nodule and on the excretion of nitrogen. XVII. Efficiency of different strains of clover nodule bacteria, *A.*, 787. Mechanism of the fermentation of dihydroxyacetone, *A.*, 1282.
- and Hausen, *S. von*, excretion of nitrogenous compounds from the root nodules of leguminous plants, *A.*, 420. Utilisation of organic compounds by plants, *B.*, 199.
- Karström, *H.*, and Laine, *T.*, preservation of amino-acids in A.I.V. silage and in ordinary silage, *B.*, 567.
- and Laine, *T.*, chemical nature of amino-acids excreted by leguminous root nodules, *A.*, 1551.
- Vischer, *A.* See Verzár, *F.*, and Süllmann, *H.*
- Vischnevski, *V.* See Reformatski, *S.*
- Vischniac, *C.* See Busquet, *H.*
- Visintin, *B.*, detection and determination of microbin in foods, *B.*, 747.
- Visking Corporation. See Dietrich, *H. E.*, and Voss, *J.*
- Visscher, *M. B.* See Burus, *H. S.*, Ingraham, *R. C.*, Peters, *H. C.*, and Poncher, *H. G.*
- Visser, *H. S.* See Kögl, *F.*
- Visser, *J. M.*, apparatus for obtaining a dry substance from solutions, emulsions, or suspensions, (*P.*), *B.*, 834.
- Visser, *J. W. C.* See De Vries, *O.*
- Visser, *S. H. R.* See Liempt, *J. A. M. van*.
- Viswanath, *R. B. B.*, and Ayyar, *C. V. R.*, examination of Indian and foreign coriander (*Coriandrum sativum*), *B.*, 282.
- Vita, *G.*, and Bracaloni, *L.*, composition of amorphous quinine iodobismuthates, *A.*, 227.
- Vitale, *E.* See Bakunin, *M.*
- Vitamin Food Co., Inc. See Allyn, *L. B.*
- "Vitamina" Soc. Anon., and Potencier, *R.*, apparatus for sterilisation by means of ultra-violet rays, (*P.*), *B.*, 827.
- Vitéz, *S. von*. See Darányi, *J. von*.
- Vitrolite Co., surface-decorated glass, (*P.*), *B.*, 149.
- Vittmann, *F.* See Sergeev, *L.*
- Vittori, *C.*, and Cereseto, *A.*, behaviour of hydrated and hardened puzzuolanic cement at high temperatures, *B.*, 1096.
- Vivaldi, *T.* See Lipschütz, *A.*
- Vivanco, *F.*, flavin balance in animals, *A.*, 903.
- Vivauti, *A.*, aluminium-copper drawn products, *B.*, 856.
- Vivarior, and Stainier, simplified molecular constants of Belgian milk, *B.*, 604.
- Viviani, *E.*, cellulose and artificial textile fibres, *B.*, 350.
- Vizern, *M.*, and Guillot, *J.*, determination of free alkali in soaps, *B.*, 237.
- Vjaskova, *M. A.*, acetylation of phenolic hydroxyl groups, *A.*, 1122.
- Vladesco, *R.*, deproteinising agent, *A.*, 1044. [Colorimetric technique], *A.*, 1475. Determination of casein [in milk], *B.*, 377.
- Vladesco, *C.* See Angelescu, *E.*
- Vladesco, *I.*, variations in the mineral and organic substances of *Nicotiana tabacum* during development, *A.*, 1431.
- Vladimirov, *A. V.*, effect of ammonia and nitrates on yield of sugar beet in relation to anion components and the reaction of the medium, *B.*, 868.
- Vladimirov, *G. E.*, and Epstein, *J. A.*, electrometric determination of bromine in the presence of large quantities of chlorine, *A.*, 1031.
- Vladimirov, *L. V.*, determination of phosphoric acid and of total sesquioxides in flotation phosphorites, *B.*, 60.
- Vladutá, *S.*, preparation of phenacetin from phenol in laboratory practice, *A.*, 744.
- Vlasov, *M. M.* See Remezov, *N. P.*
- Vlasova, *E. A.* See Nikiforov, *L.*
- Vlček, *A. K.*, two co-existent phases, *A.*, 167. Tanning drenches. I. "Ageing," *B.*, 35. [Hide-]bating preparations. I. Ageing, *B.*, 600. Analysis of enzymic bating materials [for hides and skins]. III, *B.*, 1105.
- and Pospíšil, *J.*, [hide-]bating preparations. II. Combination of pancreatin with hide substance, *B.*, 600.

- Vlès, *F.*, spectral property of electrolytes in solution, A., 444.
and Heintz, *E.*, infra-red absorption spectra of proteins, A., 1053.
- Vlugter, *J. C.*, determination of aromatic content in cracked gasolines, B., 342.
- Waterman, *H. I.*, and Westen, *H. A. van*, methods of examining mineral oils, especially the high-boiling components. I. and II., B., 836, 934.
- Vodar, *B.* See Briot, *A.*, and Tréhin, *R.*
- Vodret, *F. L.*, quinhydrone micro-electrode, A., 189.
- Vögel-Jaggi, *P.*, and Diamantschleiferei Voegeli & Wirz A.-G., abrasive bodies, (P.), B., 1044.
- Voegelin, *W. L.*, Greengard, *H.*, and Ivy, *A. C.*, response of the canine and human pancreas to secretin, A., 538.
- Voelcker, *E.*, chemical and bacteriological examination of water, B., 176.
- Voet, *A.*, electrode dispersion of noble metals, A., 1463.
- Voet, *J.* See Levaditi, *C.*
- Vogel, *A. I.*, physical properties and chemical constitution. II. Esters of $\beta\beta$ -substituted glutaric acids, A., 65.
and Jeffery, *G. H.*, thermodynamic primary dissociation constants of some normal dibasic acids at 25°, A., 33.
See also German, *W. L.*, and Jeffery, *G. H.*
- Vogel, *E.* See Kroepelin, *H.*
- Vogel, *F. A.*, and Tower, *E. B. H., jun.*, chrome tanning, (P.), B., 1009.
- Vogel, *L.*, and Laeverenz, *P.*, determination of lipase in pancreas, A., 1025.
See also Bamann, *E.*
- Vogel, *P.*, optical study of emeralds and other minerals coloured by chromium, A., 725.
- Vogel, *R.*, sulphur-manganese steels, B., 360.
See also Martin, *Erich*.
- Vogel-Jørgensen, *M.*, cement, (P.), B., 189.
Kiln plants for burning cement, (P.), B., 308. Filtering apparatus, (P.), B., 658. Apparatus for treating raw materials for manufacture of cement, (P.), B., 769. Apparatus for moistening pulverulent material, (P.), B., 786. Rotary kilns and coolers, (P.), B., 1025. Rotary tubular grinding or crushing mills, (P.), B., 1074.
and Smidth & Co., *F. L.*, apparatus for determination of grain sizes in granular material, (P.), B., 531.
- Vogelaar, *J. P. M.*, and Ehrlichman, *E.*, growth of human fibroblasts in media containing silver, A., 1021.
- Voges, *H.* See Kossel, *W.*
- Vogler, *W.*, calcium metabolism in pregnancy, A., 1270.
- Vogt, *C. C.*, mucin solvent agent, (P.), B., 656.
- Vogt, *C. H.*, sausages, (P.), B., 923.
- Vogt, *E.*, biology of the cerebrospinal fluid. V. Calcium content, A., 512.
- Vogt, *Eckhart*, diamagnetism of mercury crystals, A., 287. Magnetism and the atomic state of metallic solid solutions, A., 576.
- Vogt, *Egon*. See Hunsdiecker, *H.*
- Vogt, *Ernst*, weight [density] of must and alcohol content; a critical review, B., 376. Presence of sorbitol in pure grape wines, B., 871.
- Vogt, *H.* See Lüters, *H.*
- Vogt, *M.*, distribution of therapeutic substances in various parts of the central nervous system and their micro-determination in tissues. II. Quinine and mezcaine. V. Barbituric acid derivatives. VI. Chloral hydrate, A., 1018.
See also Veit, *F.*
- Vogt, *R. R.* See Danehy, *J. P.*, Vaughn, *T. H.*, and Young, *C. A.*
- Vogt, *W.* See I. G. Farbenind.
- Vogt-Moller, *P.*, relationship between the B-vitamins and the protein, fat, and carbohydrate content of the diet, A., 544.
- Voigt, *H.* See Thürmer, *A.*
- Voigt, *M.* See Menzel, *H.*
- Voigt, *W.* See Carlsohn, *H.*
- Voinilovitch, *G. I.*, Achrap, *L. K.*, and Mai, *L. S.*, determination of thermodynamic properties of solutions of mineral salts during evaporation and crystallisation, A., 1203.
and Akkermann, *A. I.*, materials resistant to nitric acid in preparation of alumina by the nitrate method, B., 990.
- Vasiliev, *B. B.*, and Achumov, *E. I.*, [electrolytic] preparation of sodamide by the "GIPCh" method, B., 107.
- Voit, *K.*, and Kempa, *H.*, detection of true nucleal substance in thrombocytes, A., 230.
- Voitchishin, *N. V.*, chemical composition of maize kernels, A., 133.
- Voith, *Hanns*. See under Voith, *J. M.*
- Voith, *Hermann*. See under Voith, *J. M.*
- Voith, *J. M.*, grinding apparatus for paper pulp and similar substances, (P.), B., 882.
- Voith, *L.* See Mosonyi, *J.*
- Voith, *W.* See under Voith, *J. M.*
- Voitkevich, *O.*, and Staruiguina, *L.*, rôle of lactic bacilli in Dutch cheese, B., 122.
- Voitkevitch, *A.*, micrology of kumiss production, B., 1017.
- Voitova, *E. V.*, change in chemical composition of Karaganda coals due to weathering, B., 291.
- Vojir, *F.*, application of perchloric acid to indirect determination of carbon dioxide in carbonates, A., 185. Determination of carbon dioxide in carbonates and in baking powder, B., 947.
- Vokes, *C. G.*, [felt] filter, (P.), B., 434.
- Vol-Rabinovitch, *L.*, ethyl alcohol from wood waste, B., 1045.
- Volarovitch, *M. P.*, viscosity of binary system $\text{Na}_2\text{B}_4\text{O}_7\text{-NaH}_2\text{PO}_4$ in fused state, A., 24. Viscosity and plasticity of disperse systems. III. Plastic properties of resin soaps. IV. Plastic and viscous properties of molten slags and rocks, A., 701, 820. Viscosity and plasticity of fused slags and furnace rock, B., 1049.
and Derjaguin, *B.*, determination of viscosity of molten glass and proof of H. Le Chatelier's formula. II. Concentric-cylinder method, B., 453.
- Kulakov, *N. N.*, and Romanski, *A. N.*, viscosity and plasticity of disperse systems. V. Plastic-viscous properties of peat, A., 932.
and Leonteva, *A. A.*, specific volume of fused diabase at high temperatures, A., 1313. Specific volume of fused salts at high temperatures, A., 1313.
and Samarina, *K. I.*, viscosity and plasticity of disperse systems. II. Plastic properties of dough by the rotating-cylinder method, A., 579.
- Volarovitch, *M. P.*, and Tolstoi, *D. M.*, viscosity of binary systems $\text{Na}_2\text{B}_4\text{O}_7\text{-B}_2\text{O}_3$ and $\text{NaBO}_2\text{-NaPO}_3$ in fused state, A., 24. Viscosity and plasticity of disperse systems. I. Determination of constants of plastic flow of clay suspensions. VI. Influence of temperature and electrolytes on the plastic properties of kaolin, A., 444, 1318.
See also Derjaguin, *B.*
- Vold, *R. D.*, heat capacity of methane and its halogen derivatives from spectroscopic data, A., 1064.
- Volfenson, *A. M.* See Kotnitzki, *A. I.*
- Volfkovitch, *S.*, Dubovitzki, *A.*, and Kriutschkov, *N.*, preparation of ammonium sulphate nitrate by oxidation of ammonium sulphite with oxides of nitrogen and nitric acid, B., 801.
and Loginova, *A. I.*, production of sulphur trioxide and cement from phosphogypsum, B., 671.
- Volfson, *B. N.*, and Roshdetsvenski, *V. N.*, thermo-c.m.f. and electric conductivity of antimony and cadmium, A., 572.
- Volger, *H.* See Werner, *H.*
- Volk, *M. C.* See Gilligan, *D. R.*
- Volkenshtein, *A. S.* See Klebanski, *A. L.*
- Volkenstein, *F. F.*, possible mechanism for discharges through [transformer] oils, B., 438.
- Volkert, *G.*, electrolytic treatment of precious-metal residues, B., 555.
- Volkmann, *H.* See Stuart, *H. A.*
- Volko-Starohorsky, *J.* See Prát, *S.*
- Volkov, *A. I.* See Nekheudzi, *J. A.*
- Volkova, *Z. V.*, infiltration method for investigation of the wetting power of mineral dispersoids; comparative wetting powers of corundum powders, A., 1071. Mechanism of flotation. IV. Oriented coagulation in non-polar and in aqueous media, A., 1201.
and Saporoshez, *A. V.*, mechanism of flotation; rôle of highly disperse powder in the flotation process, A., 1071.
and Serb-Serbina, *N. N.*, mechanism of flotation with water-insoluble reagents. I. Function of non-polar phase in the process of adsorption of a reagent on the suspension particles, B., 809.
- Serb-Serbina, *N. N.*, and Saporoshez, *A. V.*, mechanism of flotation with water-insoluble reagents; rôle of non-polar phase in the adsorption of the reagent on the particles of the suspension, A., 578. Mechanism of flotation; adsorption on particles of talc in aqueous suspension and its flotation, A., 820.
- Vollringer, *H.* See Tehakirian, *A.*
- Volland, *G.*, efficiency of perforated rectifier plates, B., 289.
- Vollbrecht, *H.*, and Dittrich, *E.*, attack of steels by hydrogen and hydrogen sulphide at high pressure and elevated temperature, B., 635.
See also Dittrich, *E.*
- Vollmar, *O.*, excess lime [water-]purification process, B., 255.
- Vollmer, *H.* See Peyer, *W.*
- Vollmer, *W.* See Terres, *E.*
- Vollrath, *H. B.*, and Baker Perkins, Inc., mixing, kneading, and shredding blade, (P.), B., 3.
- Vollrath, *K.*, and Lahr, *G.*, colouring of aluminium, B., 501.

- Volmar, Y., and Mathis, analytical applications of inhibition, under influence of certain ions, of fluorescence of the uranyl ion, A., 56.
- and Wagner, index of unsaturation of ethylenic compounds, A., 843.
- Volmer, M., law of Thomson and Gibbs: vapour pressure of small particles, A., 925.
- and Flood, H., droplet formation in vapours, A., 25.
- and Wick, H., hydrogen electrodes, A., 705.
- See also Suzuki, M.
- Volnov, Y. N. See Kliukvin, N. A.
- Volochvjanski, V., "micro-flotation" for clarification of sugar juices, B., 1063.
- Volodarski, A., and Kolosova, I., naphthalenesulphonic acids. I. Hydrolysis of naphthosultamidisulphonic acid, A., 1360.
- Volodina, O. A. See Dimov, A. M.
- Volshinski, I. A., Globov, V. A., and Chrenova, Z. A., recovery of Δ^2 -butene from air by silica gel, A., 1348.
- Volstein, L. M. See Grünberg, A. A.
- Volwiler, E. H., Tabern, D. L., and Abbott, Labs., sedative compounds, (P.), B., 749.
- See also Tabern, D. L.
- Volz, E. C., storage of gladiolus corms and cormels, B., 326.
- Vondrák, J., improvement of sugar beet, B., 199. Inoculation of exhausted [sugar-beet] slices with "laktacidin," B., 1111.
- Vonk, A., production of hydrocarbons of low b.p. by hydrogenation of vapours obtained by distilling or cracking oils, tars, and similar hydrocarbons, (P.), B., 616.
- Vonk, H. J., solution of fats and fatty acids by the gastric juices of *Potamobius leptodactylus*, A., 653.
- Vonsovski, S. See Schublin, S.
- Vool, B. See under Vul, B.
- Voorhees, B. V., Steffen, E., and Parsons, L. W., hydrogenation of hydrocarbons, (P.), B., 344.
- See also Reinbert, E. W.
- Voorhees, V. See Rogers, T. H., and Standard Oil Co.
- Voorst, F. T. van, determination of nitrates in meat. II, B., 604. Rapid determination of casein in buttermilk porridge, B., 971.
- Voos, E., section $\text{CaO} \cdot \text{SiO}_2 - \text{MnO} \cdot \text{SiO}_2$ of the ternary system $\text{SiO}_2 - \text{CaO} - \text{MnO}$, A., 583.
- See also Lange, B.
- Vopicka, E., and Lange, N. A., quinazolines. VII. Interaction of 2,4-dichloroquinazoline in alcohol with ammonia and methylamine, A., 991.
- Vorbrodt, M., occurrence of tyrosine in protein of *Aspergillus niger*, A., 124.
- Voris, L. See McClure, F. J.
- Voris, Le R. See Braman, W. W.
- Vofisek, J., determination of alkaline preservatives in milk by aid of hydrochloric acid index, B., 171.
- Vorländer, D., *p*-phenylcinnamic acid, A., 617.
- Vorobev, F. K., conversion of calcium cyanamide in soils and in storage, and its effects on growth of flax, B., 918.
- Vorobiev, A. A., electrical breakdown of X-irradiated rocksalt exposed to light, A., 288. Photo-electric study of monocrySTALLINE sulphur, A., 682. Cathode material and the electrical strength of rock-salt, A., 1311.
- Vorobjova, E. See Jakubovitsch, A. J., and Scherlin, S. M.
- Voronenko, M. See Nikiforov, L.
- Voronov, A. I., resinous Emba crude oil (Dzhaman-Agach deposit); light gasoline-paraffinic crude oil of the Emba district (Novobogatinski field), B., 1029. Oils from Grozni cylinder-oil distillate, B., 1031.
- Voronov, F. N. See Kliukvin, N. A.
- Voronov, N. M. See Nemilov, V. A.
- Vorontschichin, V. E., and Plachotniuk, G. S., causticisation of soda solutions by granulated lime, B., 99.
- Vorontzov, I. I., preparation of β -naphthol-1-sulphonic acid, B., 138.
- Vorontzov, R. V., detection of cobalt in presence of other cations, A., 1095.
- Voroschcov, N. N., and Karlaseh, P. V., preparation of N-W. acid from 1-chloronaphthalene, B., 137.
- Zilberman, G. V., and Grigoriev, V. M., chlorination of benzene. I. Continuous chlorination in the liquid phase, B., 1036.
- Voroschcov, N. N., jun., and Troschtschenko, A. T., vitamin-C and narcotine, A., 416. Morphine content of opium juice, B., 1022.
- Voroschilova, M. A. See Lukashevitsch, V. O.
- Vorsatz, F. See Heflerich, B.
- Vorstman, N. J. M. See Kruisheer, C. I.
- Vorutski, S., determination of insoluble matter in extracts and in solutions as a method for controlling the processes of tannin-extraction plants, B., 819.
- Vosburgh, W. C. See Cagle, W. C.
- Vose, R. S. See Du Pont de Nemours & Co., E. I.
- Voshdaeva, V. N. See Eichman, R. K.
- Voskresenski, P. I., influence of temperature on maturation of viscose, B., 299. Swelling of viscose films and methods of increasing their resistance to water, B., 540. Swelling of films as an indirect method of determining relative micellar dimensions, B., 719.
- Vosnesenski, A. A., determination of the Conradson carbon number, B., 1032.
- Vosnessenski, S. A., inner-complex salts, A., 685.
- and Aron, Z. A., purification of the effluent of gasworks working with lignite, B., 336.
- Voss, G. See Ammon, R.
- Voss, H. E., action of gonadotropic hormones on women with spontaneous cycle-insufficiency, A., 663.
- Voss, J., fluorescent phenomena in wheat varieties, B., 377.
- and Du Pont Cellophane Co., treatment of cellulose, (P.), B., 351.
- Würges, O., and Visking Corp., preparation of artificial sausage casings, (P.), B., 923.
- Voss, W., and Lax, M., esters of sulphurous acid. III. Metallic aryl sulphites, A., 79.
- and Wachs, W., cyclohexyl sulphite, A., 1492.
- Voss, W. C., classification of brick by water absorption, B., 994.
- Vosskübler, H. See Schmidt, W.
- Votoček, E., configuration of fucoxenic and rhodoxenic acids, A., 328.
- and Lukeš, R., synthesis of alkylaminoacids corresponding with chitosamic acid, A., 1486.
- Votoček, E., and Sgarzi, L., identification of arabinose in presence of other pentoses, A., 1224.
- and Valentin, F., condensation of mercaptals with 5-ketomethylpentonic acids, A., 497. Glucosyl-kotimines, ternary compounds of sugars with ammonia and β -diketones, A., 1108.
- Vovtschenko, G. D. See Blagovestschenski, A. V.
- Voyatzakis, E., potassium stannochloride in volumetric determination of copper, A., 186.
- Vozzhinskaja, Z., coking properties of Matagan boghead, B., 437.
- Vrbanova, M. See Balarev, D.
- Vredenburg, J. C. See Higginson, G. S.
- Vreeswijk, J. A., jun. See Ornstein, L. S.
- Vřešťál, J. See Jilek, A.
- Vrijling, J. J., determination of heat of combustion by means of the micro-bomb, A., 188.
- Vschivtzev, S. N. See Nasakin, S. P.
- Vucetich, D. C., 8-hydroxyquinoline and its application to [the determination of] magnesium, A., 719.
- Vuiborov, redistillation of cracked gasoline, B., 1030.
- Vuilegzhanin, B. M. See Soboliev, M. N.
- Vuks, M., and Gross, E., Raman spectra of amorphous substances, A., 564.
- See also Gross, E.
- Vul, B., and Goldman, I., influence of photo-electric current on the breakdown voltage, A., 683.
- See also Goldman, I.
- Vulliet-Durand, G. H., manufacture of transparent sheets for wrappers and other applications, (P.), B., 799.
- Vultex Corporation of America, manufacture of products from rubber dispersions, (P.), B., 738.
- and Townsend, H. B., concentrating aqueous dispersions of vulcanised rubber, (P.), B., 686*.
- Vymetal, P. See Frejka, J.

W.

- Wacek, A. von, micro-detection of volatile amines and their influence on the permeability of animal membranes, A., 639.
- and Löffler, H., micro-detection of liquid amines, especially methylamine in presence of ammonia, A., 1516.
- Waché, X. See Chevenard, P.
- Wachholder, K., Andors, K., and Uhlenbroeck, K., determination of glutathione and ascorbic acid in animal tissues, A., 793.
- and Quensel, W., glutathione content and exercising capability of muscles, A., 645.
- See also Quensel, W.
- Wachholtz, F. See Fonrobert, E.
- Wachholz, L., Baranowski, W., and Kaczy, H., spectroscopic studies of haemoglobin derivatives, A., 372.
- Wachs, W. See Voss, W.
- Wachsmuth, H. See Wuyts, H.
- Wachstein, M., two cases of myxoedema treated with thyrotropic hormone, A., 1527.

- Wacker Gesellschaft für Elektrochemische Industrie G.m.b.H., *A.*, threads resembling wool, (P.), *B.*, 18. Continuous treatment of lengths of material with volatile solvents and apparatus therefor, (P.), *B.*, 303. Solutions of natural asphalt, (P.), *B.*, 891. Increasing the fluidity of coal-tar pitch, (P.), *B.*, 1033.
- Wackher, *R. C.* See *Ipatiev, V. N.*
- Wad, *Y. D.* See *Jackson, F. K.*, and *Tambe, G. C.*
- Wada, *A.*, and *Kawai, I.*, determination of *m*-cresol, *A.*, 102.
- Wada, *C.*, concentrated food product, (P.), *B.*, 972.
- Wada, *M.*, and *Kaiwa, T.*, significance of augmented adrenaline liberation by piqûre for fluctuation of blood-sugar and of mean blood-pressure, simultaneously occurring, *A.*, 539.
- See also *Kaiwa, T.*, *Kuroda, C.*, and *Urbain, P.*
- Wada, *N.* See *Sato, Masanori.*
- Wada, *T.* See *Fujioka, Y.*
- Waddell, *C. W.*, manufacture of "invert syrup" from surplus cane, *B.*, 1062.
- Waddell, *M. C.* See *Grasselli Chem. Co.*
- Waddington, *A. H.*, and *Clark, R.*, treatment of water for the paper-making industry, *B.*, 976.
- See also *Clark, R.*
- Waddington, *C. H.*, and *Needham, D. M.*, amphibian organisation centre. II. Induction by synthetic polycyclic hydrocarbons, *A.*, 773.
- Needham, J.*, *Nowinski, W. W.*, and *Lemberg, R.*, amphibian organisation centre. I. Chemical properties of the evocator, *A.*, 773.
- Waddington, *G.*, and *Tolman, R. C.*, thermal decomposition of nitrosyl chloride, *A.*, 708.
- Wade, *G.*, analyses of Texas crude oils, *B.*, 483.
- Wade, *H. N.*, reflux control system for stabilising towers, (P.), *B.*, 387. Practical aspects of propane, *B.*, 663.
- Wade, *J. B.*, and *McKenzie, H. J.*, [liquid] treating device, (P.), *B.*, 482.
- Wade, *L. J.* See *Schmitt, F. O.*
- Wade, *N. J.*, and *Doisy, E. A.*, prolonged administration of theelin and theelol to male and female rats and its bearing on reproduction, *A.*, 1173.
- Wade, *W. H.* See *French, H. E.*
- Wadell, *H.*, volume, shape, and roundness of quartz particles, *A.*, 1093.
- Wadleigh, *C. H.* See *Arrington, L. B.*
- Wadleigh, *W. H.* See *Harrison, W. N.*
- Wadman, *H. A.*, and *Hartford-Empire Co.*, manufacture of glass with salt, (P.), *B.*, 546. Annealing of glassware, (P.), *B.*, 631.
- Wadsworth, *D. V.*, *Wickenden, L.*, and *Naugle, J. J.*, treatment of sugar melts, (P.), *B.*, 649.
- Wadsworth, *H. A.*, relationship between chemical composition of soil colloids and two of their properties, *B.*, 470.
- Wadsworth, *J. M.*, decolorisation and desulphurisation of hydrocarbon vapours, (P.), *B.*, 295.
- See also *Universal Oil Products Co.*
- Waelsch, *H.*, dehydrogenases and hydrogen donors in the brains of narcotised and hypnotised animals; animal immobilisation, *A.*, 532.
- Kittel, S.*, and *Busztin, A.*, exchange of mineral matter between corpuscles and plasma in blood, *A.*, 1142.
- Waelsch, *H.*, and *Klepeter, G.*, dehydrogenases and hydrogen donors in the brains of animals when narcotised, hypnotised, and poisoned with iodoacetic acid, *A.*, 638.
- and *Klepeter, G.* [with *Busztin, A.*], determination of benzoic acid in biological material; enzymic transformation of the acid in horse-kidney, *A.*, 1409.
- Waelsch, *H. H.*, microscopical observation of the electrophoresis of dyes, bacteria, blood corpuscles, etc., with cellophane as semi-conductor, *A.*, 1321.
- Waern, *A. W.*, [black-lash smelter, (P.), *B.*, 590.
- Bunde, L. F.*, and *Nekoosa-Edwards Paper Co.*, [gastight rotating joint for] waste-heat recovery apparatus, (P.), *B.*, 578.
- Waesberghe, *F. A. M. J. S. van.* See *Waterman, H. I.*
- Waeser, *B.*, phosphates, superphosphates, and basic slag, *B.*, 20. Hydrogen industry, *B.*, 355. Attack of metal retorts by combustion gases containing sulphur, *B.*, 593.
- Wafflard, *J.* See *Korczewski, M.*
- Wagenaar, *M.*, microchemistry of diethyl-bromoacetylcarbamide (adaline), *A.*, 72. Localisation of alkaloids in ipecacuanha root, *A.*, 796. Microchemical reactions on pyrimidone, *A.*, 877. Microchemistry of antipyrine, *A.*, 877. Method for making indefinite or invisible bloody fingerprints visible, *A.*, 999. Detection of free hydrochloric acid in stomach contents, *A.*, 1147. Coloration of pyrimidone by oxidising agents, *B.*, 603.
- Wager, *R.*, helium "beds," *A.*, 724.
- Waggaman, *W. H.*, and *Oberphos Co.*, nitrogenous fertiliser, (P.), *B.*, 200.
- See also *Kerschbaum, F. P.*
- Wagner. See *Volmar, Y.*
- Wagner, *C. R.*, production of gasoline by polymerisation of olefines, *B.*, 887. and *Pure Oil Co.*, utilising natural hydrocarbon gases, (P.), *B.*, 663. Fractionation of gasoline-like hydrocarbons, (P.), *B.*, 893. Removal of salt compounds from crude oil, (P.), *B.*, 1034.
- See also *Osterstrom, R. C.*, and *Spiehler, A. F.*
- Wagner, *E.* See *Dubský, J. V.*
- Wagner, *E. C.*, condensations of aromatic amines with formaldehyde in media containing acid. III. Formation of Tröger's base, *A.*, 1118.
- See also *Eisner, A.*, and *Parkinson, A. E.*
- Wagner, *F.* See *Hein, F.*
- Wagner, *Georg.* See *Klemenc, A.*
- Wagner, *Gustav.*, *Schwab, G. M.*, and *Staeger, R.*, X-ray examination of mixed catalysts, *A.*, 455.
- Wagner, *Hans.*, statistics on durability of vehicles for exterior paints, *B.*, 277. and *Pabst, E.*, lead chromates as anti-rust pigments, *B.*, 913. and *Schirmer, H.*, basic lead chromate and its transition, *A.*, 592.
- Wagner, *Hubert.*, and *Siemering, R.*, pozzuolana cements, (P.), *B.*, 632.
- Wagner, *H. P.* See *Betterton, J. O.*
- Wagner, *H. W.*, electrostatic precipitation for cleaning industrial gases, *B.*, 910.
- See also *Sturtevant Eng Co.*
- Wagner, *L. A.* See *Swenson, J. A.*
- Wagner, *O.*, determination of digestibility of proteins in fish meal, etc., *B.*, 698.
- Wagner, *O. H.*, storage of carbon monoxide, *B.*, 403.
- Wagner, *R.* See *Hilpert, R. S.*
- Wagner, *R. I.*, and *Chem. Foundation, Inc.*, isolation of gland extracts, (P.), *B.*, 1166.
- Wagner, *W. G.*, *Lucas, A. R.*, *Dietzsch, F.*, and *Hogg, S. J.*, white lead [from lead chloride], (P.), *B.*, 562.
- Wagner Electric Corporation, operating liquid for fluid-pressure apparatus, (P.), *B.*, 611*.
- See also *Bebie, J.*
- Wagner-Jauregg, *T.*, phospho-*l*-lactic acid, *A.*, 731.
- and *Rauen, H.*, enzymic dehydrogenation of citric acid, *A.*, 1023.
- Rauen, H.*, and *Möller, E. F.*, action of vitamin-*B*₂ and participation of flavo-proteins in enzymic dehydrogenations, *A.*, 130. "Intermediate enzyme" from frog's muscle, *A.*, 400.
- See also *Kuhn, R.*
- Wagstaff, (*Miss*) *A. I.* See *Cox, E. G.*
- Wahl, *A.*, isoidigotin and related compounds, *A.*, 1134. Cotton dyeing and substantivity, *B.*, 588.
- and *Ringeissen, M.*, di-2-hydroxy-1-naphthyl sulphide, *A.*, 616.
- See also *Lantz, R.*
- Wahl, *H.*, fuel for coal-dust [fired internal-combustion] engines, *B.*, 706.
- Wahl, *Henri.*, chlorinated derivatives of *p*-xylene, *A.*, 739.
- Wahl, *M.*, and *Wohlmuth, H. L.*, [fermented] beverages, (P.), *B.*, 520.
- Wahl, *M. H.*, and *Urey, H. C.*, vapour pressures of the isotopic forms of water, *A.*, 1064.
- See also *Brickwedde, F. G.*, *Urey, H. C.*, and *Webster, L. A.*
- Wahl, *R.*, and *Laval, P.*, use of sera precipitated by *N*/300-hydrochloric acid in fixation reaction for tuberculosis, *A.*, 1003.
- Wahlberg, *H. E.*, bleaching of cellulose by irradiation, *B.*, 541.
- Wahlberg, *Y.* See *Tuschhoff, E.*
- Wahlforss, *E.* See *Glidden Co.*
- Wahlstrom, *E. E.*, unusual occurrence of asbestos, *A.*, 60. Minerals of the White Raven Mine, Ward, Colorado, *A.*, 955.
- Waibel, *F.*, quantitative flame spectrum analysis, *A.*, 947. Material testing by flame analysis, *A.*, 1091.
- and *Schottky, W.*, measurement of photographic exposure on a photo-electric basis, *B.*, 574.
- Waine, *A. C.* See *Haworth, W. N.*
- Wainer, *E.*, removal of iron, *A.*, 55.
- Wainwright, *C.*, outline of tests applicable to synthetic resin moulding materials, [mouldings] and laminated boards, *B.*, 684.
- Wait, *J. F.*, treatment of hydrocarbon oils, (P.), *B.*, 135. [Electrical] treatment of chemicals, (P.), *B.*, 813. Fractionation and apparatus therefor, (P.), *B.*, 930. [Sheet-like] composition and its production, (P.), *B.*, 945.
- Wajzer, *J.*, investigations on lipins in view of a theory of pharmacodynamic effect of alkalis and alkaline earths, *A.*, 120. Static interfacial tension as a function of concentration of alkali in saponification of an oil, *B.*, 640. Surfaces of separation; saponification at interfaces, *A.*, 1071.
- See also *Nachmansohn, D.*
- Wakasugi, *K.*, perfusion of the stomach. V. Lactic acid formation from *d*-alanine *A.*, 1152.

- Wakefield, *H. F.* See Courtney, *R. P.*
 Wakefield, *L. L.* See Texas Co.
 Wakefield & Co., Ltd., *C. C.*, and Evans, *E. A., jun.*, treatment of lubricating oils, (P.), B., 760.
 Wakelin, *A. J.*, and Denney, *C. E.*, refining of metals, (P.), B., 315.
 Wakeman, *R. L.* See Mulliken, *S. P.*
 Waki, *M.* See Kataoka, *K.*
 Wakker, *C. H.*, use of photo-electric cells for determining oxides of nitrogen and ozone, A., 465.
 Waksman, *S. A.*, distribution and conditions of existence of bacteria in the sea, A., 406. Wood decomposition, B., 229. Place of humic acid in the chemistry of humus, B., 324. Soils and crops [composts for mushroom culture], B., 516.
 and Allen, *M. C.*, decomposition of polyuronides by fungi and bacteria. II. Decomposition of alginic acid by bacteria and formation of alginase, A., 254.
 and Carey, *C. L.*, decomposition of organic matter in sea-water by bacteria. I. Bacterial multiplication in stored sea-water. II. Influence of addition of organic substances on bacterial activities, A., 1169.
 Hotchkiss, *M.*, and Carey, *C. L.*, marine bacteria and their rôle in the cycle of life in the sea. II. Bacteria concerned in the nitrogen cycle, A., 406.
 Wakui, *M.*, acidophile pyorrhea: acid-forming bacteria, A., 664.
 Wal, *M. J. van der*, explosive reactions between combustible gases and nitrous and nitric oxides, A., 1081.
 Wal, *R. J. V.* See Gilman, *H.*
 Walbaum, *H.*, and Rosenthal, *A.*, [aldehyde of violet leaves], A., 66.
 Walcher, *A.*, and Amer. Steel Foundries, mould for casting ferrous metals [*e.g.*, steel], (P.), B., 999.
 Walcher, *W.* See Kemnitz, *G.*
 Waldbauer, *L.*, and McCann, *D. C.*, crystal structure of common zoisite, A., 686.
 Waldbauer, *O.*, resazurin reductase test [in milk], A., 512.
 Walde, *A. W.*, temperature variation of ionisation constants in aqueous solution, A., 823. Rôle of *o*-substitution in the ionisation of organic acids and bases, A., 1076.
 and Hixon, *R. M.*, alkaline oxidation of lignin, A., 214.
 Walden, *G. H.*, Hammett, *L. P.*, and Gaines, *A., jun.*, magnetic properties of the phenanthroline ferric complexes, A., 923.
 Waldenström, *J.*, Fink, *H.*, and Hoerbücker, *W.*, uroporphyrin regularly produced in acute porphyria, A., 776.
 Waldmann, *E.*, and Chwala, *A.*, production of sulphuric [sulphonic] acids of aliphatic amino-ethers of high mol. wt.; [textile assistants], (P.), B., 984.
 See also Ruzicka, *L.*
 Waldo, *A. W.*, identification of copper ore minerals by means of X-ray powder diffraction patterns, A., 1474.
 Waldorp, *C. P.*, and Alvarez, *A. G.*, treatment of hamophilia: action of Congo-red, A., 1007.
 Waldschmidt-Leitz, *E.*, and Akabori, *S.*, enzymic components of proteinase from pancreas, A., 123.
 and Bartunek, *K.*, activation of cathepsin, A., 785.
 Waldschmidt-Leitz, *E.*, and Nonnenbruch, *W.*, phosphatase in blood and urine, A., 534.
 Wale, *W. H.*, coated fabrics, (P.), B., 946.
 Walerstein, *I.*, high series terms in arc spectrum of mercury, A., 137. Character of the ^{35}S terms in the mercury spectrum, A., 272.
 Walger, *O.* See Plank, *R.*
 Walidow, *I.*, analysis of fatigue in nerve-muscle preparations, A., 782.
 Walke, *H. J.*, radioactivity and nuclear synthesis, A., 7. Nuclear synthesis and isotopic constitution, A., 275. Nuclear synthesis and stellar radiations, A., 427. Absorption of cosmic rays, A., 560. Nuclear structure of beryllium and mass of the neutron, A., 560. Radioactivity of the rare earths, A., 677. Induced β -radioactivity by β -particle bombardment, A., 803. Isotopes of the radioactive elements and their disintegration, A., 910. Refractive index of the alkaline chlorides at low concentrations, A., 916. Non-observance of induced β -radioactivity with the light elements, A., 1049. Nuclear evolution of iron, cobalt, and nickel, A., 1442. Positive and negative ions in the primary cosmic radiation, A., 1442. Isotopes of arsenic, selenium, mercury, and lead, A., 1295.
 See also Newman, *F. H.*
 Walker, *A. O.* See Schlesinger, *H. I.*
 Walker, *Albert O.*, and Tru-Way Manufg. Co., pressure filter, (P.), B., 481.
 Walker, *C. P.*, materials and methods for solubilising and desizing starches, B., 779.
 Walker, *E. E.* See Imperial Chem. Industries.
 Walker, *Florence*, and Sheppard, *L.*, variations in saccharogenic power of human saliva, A., 1146.
 Walker, *Frederick*, late palaeozoic quartz-dolerites and tholeiites of Scotland, A., 1345.
 and Davidson, *C. F.*, marginal and contact phenomena of Dorback granite, A., 955.
 Walker, *F. T.* See Imperial Chem. Industries.
 Walker, *G. E.*, Marshall, *A. E.*, Dun, *H. E.*, and Southern Mineral Products Corp., purification of [natural] phosphates [and manufacture of phosphoric acid], (P.), B., 187.
 Walker, *H. G.*, and Anderson, *L. D.*, arsenical substitutes for control of vegetable crop insects at the Virginia Truck Experimental Station, B., 968.
 See also Anderson, *L. D.*
 Walker, *H. W.* See Calcott, *W. S.*, and Du Pont de Nemours & Co., *E. I.*
 Walker, *I. F.*, and Christensen, *B. E.*, determination of methane by catalytic oxidation, B., 261.
 Walker, *James*, biogenesis of terpenes, A., 351.
 See also Aicher, *A.*, Baker, *W.*, and Robinson, *R.*
 Walker, *John*. See Hodgson, *H. H.*
 Walker, *J. B.* See Texas Co.
 Walker, *J. C.*, and Larson, *R. H.*, calcium cyanamide in relation to control of clubroot of cabbage, B., 1061.
 and Link, *K. P.*, toxicity of phenolic compounds to onion-bulb parasites, B., 516.
 Walker, *John Charles*, and Empire Oil & Refining Co., removal of oxygen from combustible gases, (P.), B., 393.
 Walker, *J. F.*, effect of carbon dioxide on the beat of the lateral body walls of the grasshopper embryo, A., 1413.
 Walker, *J. J.*, and Slater, *L.*, infra-red photography of coal, A., 722.
 Walker, *J. P.*, Marchant, *G. O.*, and Wells, *C. G.*, fluid and liquid separation, (P.), B., 579. Liquid and gas separation, (P.), B., 579.
 Williams, *E. R.*, and Nat. Tank Co., liquid and gas separator, (P.), B., 1027.
 Walker, *J. S.*, mottled [tooth] enamel, A., 896.
 Walker, *J. T.* See Kohler, *E. P.*
 Walker, *M.* See Du Pont de Nemours & Co., *E. I.*
 Walker, *M. K.* See Johnston, *H. L.*
 Walker, *O.* See Ruggli, *P.*
 Walker, *O. J.*, absorption spectra of iodine solutions and the influence of the solvent, A., 1443.
 and Weiss, *J.*, influence of the electrode surface on anodic processes, A., 1079.
 and Wild, *G. L. E.*, decomposition of acetyl peroxide, A., 472.
 Walker, *P. C.* See McQuarrie, *J.*
 Walker, *R. H.*, base exchange in Iowa soils, B., 1009.
 and Brown, *P. E.*, effects of lime on pH and base-exchange complex of Grundy silt loam, B., 513. Numbers of *Rhizobium meliloti* and *R. trifolii* in soils, as influenced by soil-management practices, B., 691. Nitrification in Grundy silt loam as influenced by liming, B., 918.
 and Willis, *W. H.*, fixation of atmospheric nitrogen by non-symbiotic micro-organisms, B., 1009.
 See also Anderson, *D. A.*, Brown, *P. E.*, and Dean, *Harold L.*
 Walker, *R. R.*, sintered [carbide] alloy, (P.), B., 908.
 Walker, *R. S.*, and Link-Belt Co., material screening apparatus, (P.), B., 338.
 Walker, *T. K.*, Hastings, *J. H. H.*, and Vero, *E.*, preservative principles of hops. XVI. Action of antiseptics on logarithmic phase of growth of *B. bulgaricus* and selection of a standard of antiseptic value for use in determination of antiseptic powers, B., 474.
 Walker, *W. O.*, Kopsch, *U.*, and Smith Corp., *A. O.*, acetic acid, (P.), B., 840.
 Walkley, *A.*, methods for determining organic carbon and nitrogen in soils, B., 1157.
 Wail, *C. L.* See Bleachers' Assoc.
 Wall, *F. T.* See Brockway, *L. O.*
 Wall, *M. J.*, and Linde Air Products Co., welding of copper alloys, particularly wrought alloys, (P.), B., 908.
 Wall, *M. P.*, and West, *L. B.*, drying of materials, (P.), B., 337.
 Wall, *T. F.*, abnormal magnetic behaviour of treated cobalt wire, A., 1309. Quality of steel and magnetic research, B., 310.
 Wallace, *B. F.*, foundry facing, (P.), B., 29.
 Wallace, *E. K.* See Moore, *Jay R.*
 Wallace, *E. L.*, measuring pH of leather, using a simple glass-electrode assembly, B., 818.

- Wallace, E. L., Critchfield, C. L., and Beek, J., jun., effect of sulphuric acid on chrome-tanned leather, B., 686. Influence of sulphonated cod-liver oil on deterioration of vegetable-tanned leathers by sulphuric acid, B., 916, 1008.
- Kanagy, J. R., and Critchfield, C. L., influence of some sulphur-containing tanning materials on deterioration of vegetable-tanned leather by sulphuric acid, B., 1106.
- See also Bowker, R. C.
- Wallace, G. I., and Tanner, F. W., microbiology of frozen food. II. Frozen fruits and vegetables, B., 331.
- Wallace, G. L., and Fiberloid Corp., electroplating [with chromium-nickel alloy], (P.), B., 274.
- Wallace, G. W. See Brit. Coal Products Co.
- Wallace, H. A. See Groggins, P. H.
- Wallace, H. V. See Logue, L. H.
- Wallace, R. W. See Cooper, H. P.
- Wallace, T., chlorosis of fruit trees. V. Control of lime-induced chlorosis by injection of iron salts, B., 517.
- See also Warne, L. G. G.
- Wallace & Tiernan Products, Inc., and Schmelkes, F. C., sterilising agents, (P.), B., 206.
- Schmelkes, F. C., and Marks, H. C., N-dichloroazodicarbonamidine, (P.), B., 1165.
- See also Baker, J. C., Schmelkes, F. C., and Warren, J. P.
- Wallach, J. See Brintzinger, H.
- Wallauschek, R., and Bergmann, P., electron microscope using purely magnetic fields, A., 723.
- Wallenberg, V. H. See Elfving, T. M.
- Walles, E. See Langseth, A.
- Wallin, C. E., blast-furnace coke quality and practical experiences of coke testing in connexion with blast-furnace operation, B., 932.
- Wallin, L. See Palomaa, M. H.
- Walling, C. T. See Fisher, C. H.
- Wallis, A. E. See Harrison, C. F. R.
- Wallis, E. S., and Fernholz, E., constitution of dehydroandrosterone and its preparation from cholesterol, A., 1125. Preparation of dehydroandrosterone from cholesterol, A., 1242. Oxidation and reduction of dehydroandrosterone, A., 1242. Constitution and preparation of the testicular hormone, A., 1500.
- Wallis, G. C., Palmer, L. S., and Gullickson, T. W., relation of vitamin-D to calcium and phosphorus retention in cattle as shown by balance trials, A., 1154.
- Wallis, J. S., and Alco Products, Inc., fractionating tower stripper construction, (P.), B., 11. Tube still and furnace construction, (P.), B., 83.
- and Foster Wheeler Corp., [hydrocarbon] oil distillation, (P.), B., 11.
- and Hayford, A. W., hydrocarbon motor fuels, (P.), B., 343.
- Schutt, H. C., and Alco Products, Inc., re-running of [hydrocarbon oil] pressure distillate, (P.), B., 11.
- Wallis, T. E., counting-field finder [for microscope], A., 1217.
- Wallis, W. B., manufacture of plain carbon steels in top-charge rapid-type [are] furnace, B., 1097.
- Wallmann, H., effect of pressure and addition of foreign gases on relaxation time of vibrational heat in carbon dioxide, A., 289.
- Wallmann, K., relation between X-ray photograph and tensile properties of welds [in steels], B., 230.
- Wallner, J., calcite formed under influence of plants, A., 553. Chironomide tufa, A., 956.
- Walls, E. See North Brit. Rayon.
- Walls, L. P., phenanthridine series. IV. Synthesis of plasmquin-like derivatives, A., 1506.
- Walls, R., revision of data of the enstatite-hypersthene series, A., 1344.
- Walls, W. S. See Smyth, C. P.
- Wallström, J. A. See Johansson, K. A.
- Walraven, W. B., separate [sewage-sludge] digestion tanks and their operation, B., 431.
- Walsh, J. F., and Celluloid Corp., sheets of cellulosic plastic, (P.), B., 97.
- Flynn, K., and Celluloid Corp., composition for non-inflammable cellulosic film, (P.), B., 987.
- MacDonough, J. F., and Amer. Maize Products Co., [plastic] zein compositions, (P.), B., 467.
- Walsh, L. J., development of volatiles from hydrocarbon substances, (P.), B., 135.
- Walsh, V. G., medical preparations of bacterial toxins, (P.), B., 478.
- Walsh, W. L., apparatus for m.p. and micro-b.p. [determinations], A., 57.
- and Milas, N. A., photo-electric thermoregulator, A., 598.
- See also Milas, N. A., and Underwood, H. W., jun.
- Walter, E. See Raub, E.
- Walter, E. D. See Burrell, R. C.
- Walter, G. (Berlin). See Grossfeld, J.
- Walter, Georg, Adler, M., and Reimer, G., complex metal-thiocarbamide salts. V. Electrochemical relations of complex metal-thiocarbamide salts, A., 167.
- and Lutwak, H., artificial resins. IX. Physico-chemical investigation of the course of the urea-formaldehyde condensation. 3. Urea-formaldehyde resins, B., 194.
- and Storfer, E., complex metal-thiocarbamide salts. II. Equilibrium in trithiocarbamide-cuprous chloride solution. III. Conductivity and viscosity measurements on trithiocarbamide-cuprous chloride solutions. IV. Direct displacement of copper in trithiocarbamide-cuprous chloride by other metals, A., 167.
- Walter, H. G., report of the 1933-1934 Committee on methods of testing self-raising flours, B., 651.
- Walter, J., and Mines Domaniales de Potasse d'Alsace, crystallising apparatus, (P.), B., 1077.
- Walter, L. A., and McElvain, S. M., 2-pyridylethylmalonic acid, A., 1504.
- Walter, R. See Fries, K.
- Walters, A. C., and Campbell, C. D., mylonites from the San Andreas fault zone, A., 956.
- Walters, C. F. See Tilt, J.
- Walters, E. A., rust-preventing composition, (P.), B., 155.
- Walters, J. A., photo-electricity and chemical industry, B., 414.
- Walters, O. S., and May, J. W., comparison of various concentrations of sodium oxalate solution with heparin for determination of packed cell volume, A., 1391.
- Walters, R. A., and Hougen, O. A., silk degumming. I. Degradation of silk sericin by alkalis, B., 986.
- Walters, T. M. See Hinkel, L. E.
- Walther, C. See Terres, E., and Ubbelohde, L.
- Walther, H. H., electric-furnace practice for cast iron, B., 309.
- Walti, A., action of *Aspergillus niger* on n - α -diols, A., 193.
- Waltman, B. B., Higson, J. E., Cass, F. S., and Cody, J. J., centrifugal amalgamator, (P.), B., 1099.
- Waltman, C. S. See Olney, A. J.
- Waltner, K., vitamin-A content of food-stuffs, A., 129.
- Walton, B. See Phillips Chem. Co.
- Walton, C. L., control of *Phyllopertha horticola*, L., in grassland, B., 822.
- Ogilvie, L., and Mulligan, B. O., effect of calcium cyanamide and of formalin on pea "sickness," B., 822.
- See also Kearns, H. G. H.
- Walton, E. See Morgan, G. T.
- Walton, E. T. S. See Cockcroft, J. D.
- Walton, G. P., and Gardiner, R. F., conservation of wastes from small-scale slaughter of meat animals, B., 522.
- Walton, J. H. See Fowler, D.
- Walton, R. P., and Lacey, C. F., absorption of drugs through oral mucosa, A., 1018. Motor effects of morphine and derivatives on Thierry fistulae, A., 1019.
- Waltzinger, E., diastase in mixtures of synthetic and natural honey, B., 428.
- Waly, A. See Brasch, A.
- Walz, K. See Graf, O.
- Wambacher, H. See Blau, M.
- Wampler, R. W., and Libbey-Owens-Ford Glass Co., safety glass, (P.), B., 902.
- Wan, C. S. See Ho, K.
- Wan, S., biological value of proteins and digestibility of food constituents of mixed vegetarian diets containing processed wheat brans, A., 1014.
- Wanag, G., alkylation of bindone, A., 623.
- Wanderscheck. See Biltz, H.
- Wandrowski, B. See Alten, F.
- Wang, C. C. basal metabolism of American-born Chinese girls and of American girls of the same age, A., 889.
- Wang, D. S. See Chang, T. Y.
- Wang, G. H. See Hsu, C. F.
- Wang, H. See Cheng, F. W., and Kobayashi, Yozo.
- Wang, H. L. See Tang, T. Y., and Tang, Y. C.
- Wang, S. H. See Liu, S. H.
- Wang, S. M. See Liou, O. T.
- Wang, Y., components of shaohsing-chiu, A., 1180.
- and Wu, H., use of albino rats for assay of the male sex hormone, A., 1033.
- Wang, Y. L., influence of toluene on activity of pepsin and trypsin, A., 404.
- Wangensteen, O. H. See Hibbard, J. S., and Rea, C. E.
- Wani, K., sulphatising roasting of cupric oxide, B., 678. Chemical reactions in a copper blast furnace, B., 678.
- Wannow, H. A. See Jelinek, K.
- Wantland, W. W., effect of irradiated ergosterol and calcium lactate on calcification on trichina cysts, A., 776.
- Wappes, H. See I. G. Farbenind.
- Warasi, W., quinine action, A., 780.

- Warburg, O., and Christian, W., co-enzymes, A. 121. Salts of base from co-enzyme preparations, A., 249. [Base from] co-enzyme preparations, A., 400.
- Christian, W., and Griese, A., active group of co-enzyme from erythrocytes, A., 1162.
- Ward, A. L., and Fulweiler, W. H., specific refractive dispersion for distinguishing between different series of hydrocarbons, A., 61.
- Jordan, C. W., and United Gas Improvement Co., gas purification, (P.), B., 936.
- See also Jordan, C. W.
- Ward, A. M. See Boot, H. L. G., Fleck, H. R., Middleton, A. W., and Taylor, W.
- Ward, C. B. See Lamson, P. D.
- Ward, D. See Scholefield, F.
- Ward, E. D. See Mears, R. B.
- Ward, G. E., Lockwood, L. B., May, O. E., and Herrick, H. T., production of fat from glucose by moulds; cultivation of *Penicillium javanicum*, van Beijma, in large-scale laboratory apparatus, A., 662.
- See also Lockwood, L. B.
- Ward, J. C., Munch, J. C., Spencer, H. J., and Garlough, F. E., strychnine. III. Effectiveness of sucrose, saccharin, and dulcin in masking bitterness of strychnine, B., 123.
- See also Munch, J. C.
- Ward, J. T., and Forrest, H. O., solvent extraction in petroleum refining, B., 615.
- Ward, K., jun., chlorinated ethylamines; new type of vesicant, A., 849.
- Ward, L. A., deoxidation and degasification of yellow brass, B., 1048.
- Ward, M., and Morrison, H. R., fertiliser, (P.), B., 118.
- Ward, N. C., and Anderson-Tully Co., treatment of material containing cellulose, (P.), B., 223.
- Ward, P. R. See Charman, W. M.
- Wardlaw, H. S. H., determination of glucose in 0.1 ml. of blood by a modified Folin-Malmros method, A., 1392.
- Barry, H. C., McDonald, I. W., and McIntyre, A. K., haemoglobin and solids of blood of Australian aborigines and whites, A., 878.
- Wardlaw, W. See Cox, E. G., and Jennings, J. S.
- Ware, L. M., polishing, bleaching, and dyeing the pecan, B., 379. Influence of different fertiliser treatments and seasonal conditions on characteristics, composition, and properties of strawberries, B., 422. Effect of fertiliser treatment on yield, grade, and quality of Irish potatoes, B., 422.
- Ware, W. M. See Goodwin, W., and Martin, Hubert.
- Warembourg, H. See Grandclaude, C., and Polonovski, M.
- Warhurst, E. See Fairbrother, F.
- Waring, C. E. See Eastman Kodak Co.
- Waring, R. K., Anderson, E. A., Springer, R. D., and Wilcox, R. L., equilibrium in the lead-zinc system with reference to liquid solubility, A., 158.
- Wark, E. E., and Wark, I. W., physical chemistry of flotation. VI. Adsorption of amines by sulphide minerals, A., 1458.
- Wark, I. W., theory of flotation, A., 931.
- and Cox, A. B., coalescence in stages between two drops of a liquid, A., 1062.
- Wark, I. W., and Cox, A. B., flotation. III. Influence of cyanide, alkalis, and copper sulphate on effect of sulphur-bearing collectors at mineral surfaces, B., 25. Physical chemistry of flotation. V. Flotation of graphite and sulphur by collectors of the xanthate type and its bearing on the theory of adsorption, B., 671.
- See also Wark, E. E.
- Wark, N. J., recovery of vanadium from pig iron, (P.), B., 503.
- Warmuth, H. J., rosin for soap, with reference to wood rosin, B., 277.
- Warne, L. G. G., and Wallace, T., composition of terminal shoots and fruits of two varieties of apple in relation to rootstock effects, A., 674.
- Warne, R. B., composition and use of gravure inks, B., 815.
- Warner, A. W., operating retort to produce coke, gas, and oil, (P.), B., 87.
- and Isbell Porter Co., coking retort, (P.), B., 1033.
- Warner, D. F. See Gen. Electric Co.
- Warner, J. C., and Warrick, E. L., kinetic medium and salt effects in reactions between ions of unlike sign; reaction between ammonium ion and cyanate ion, A., 1207.
- See also Lee, H. H., and Svrbely, W. J.
- Warner, J. D. See Barnette, R. M.
- Warner, T. W., jun., spectrographic analysis of tourmalines with correlation of colour and composition, A., 1345.
- Warner Chemical Co. See Coleman, J. H.
- Warnke, C. J., and Adams & Westlake Co., treatment of gases [for use in mercury switches], (P.), B., 544. Pure hydrogen, (P.), B., 590.
- Warren, B. E., atomic arrangement in vitreous silica and germanium dioxide, A., 1451.
- and Amberg, C. R., X-ray study of narsarsukite, $\text{Na}_2(\text{Ti}, \text{Fe})\text{Si}_2\text{O}_{11}$, A., 841.
- and Burwell, J. T., structure of rhombic sulphur, A., 285.
- and Hill, C. F., structure of vitreous BeF_2 , A., 285.
- and Krutter, H. M., X-ray study of crystal structure of Rochelle salt and effect of temperature, A., 18.
- and Loring, A. D., X-ray diffraction study of structure of soda-silica glass, A., 1308.
- See also Hiltgren, R., and Morey, G. W.
- Warren, C. O., jun., oxygen consumption of rabbit bone-marrow in relation to its morphology, A., 520.
- See also Ramsey, R.
- Warren, C. R. See Light, A. B.
- Warren, D. T., ultra-violet absorption of iodine vapour, A., 272.
- Warren, E. See Green & Co. (Ecclesfield), Ltd., W.
- Warren, F. L., alleged oestrogenic activity of the male sex hormone, A., 414.
- Warren, F. W. See Internat. Latex Processes.
- Warren, G. E. See Parks, G. S.
- Warren, G. W. See Dow Chem. Co.
- Warren, H. V., and Lord, C. S., occurrence of schwartzite in British Columbia, A., 469.
- Warren, J. P., Beensen, C. H., and Wallace & Tiernan Products, Inc., removal of slimy growth accumulations from water-contact surfaces, (P.), B., 976.
- Warren, W. B., carbonisation of coal; evaluation of effects of rate of heating and of maximum temperature on pyrolysis of a coking coal, B., 612.
- Warren, W. H., and Wilson, F. E., action of thionyl chloride on anilides, carbamides, and urethanes, A., 854.
- Warren, W. J. See Clark, G. L.
- Warren, W. J. A. See Turner, W. E. S.
- Warrentrup, H. See Eucken, A.
- Warrick, E. L. See Warner, J. C.
- Warrick, L. F. See Ruf, H. W.
- Warschawski, S. L., preparation of β -chlorovinylarsine sulphide, A., 1487.
- Wartenberg, H., catalytic effect of platinum and gold in soil suspensions: redox potential of soils, B., 371.
- Wartenburg, H. von, and Wehner, G., anode effect in the electrolysis of melts. II., A., 942.
- Warth, F. J., report of physiological chemist, 1932-1933, A., 779.
- Wartman, F. S., and Thompson, A. J., preparation and properties of copper ferrite, A., 312.
- See also Gottschalk, V. H.
- Warweg, E., and Stearns, G., phosphorus of blood. II. Partition of phosphorus in blood in relation to the corpuscle volume, A., 374.
- See also Stearns, G.
- Washburn, E. R., and Berry, G. W., dimensions of the sodium palmitate molecule from surface tensions in dilute aqueous solutions, A., 930.
- and Handorf, B. H., vapour pressure of binary solutions of ethyl alcohol and cyclohexane at 25°, A., 576.
- See also Handorf, B. H., and Olsen, A. L.
- Washburn, E. W., inducing crystallisation, B., 530.
- Smith, E. R., and Smith, F. A., fractionation of isotopes of hydrogen and oxygen in a commercial electrolyser, A., 175.
- Washburn, R. G. See Knoop, C. E.
- Washburn, T. S. See Epstein, S.
- Wasiecki, R., and Gmach, E., macro-, micro-, and histo-chemical detection of cineole, A., 1141.
- Wasilewski, L., Kaczorowski, A., and Dynkin, M., m.-p. diagram of the system $\text{AlCl}_3\text{-NaCl-KCl}$, A., 168.
- and Kotowicz, A., influence of conditions of preparation of carbon electrodes on properties, B., 158.
- and Zaleski, J. Z., electrolytic production of lithium, A., 176.
- Zaleski, J. Z., Kaczorowski, A., and Badzyński, W., sulphur dioxide and Portland cement from gypsum, B., 146.
- Wasitzky, A. See Wasitzky-Strobl, A.
- Wasitzky-Strobl, A., and Wasitzky, A., antibody content of animal tissues after treatment with thymus extract, A., 644.
- Wass, J., grinding, crushing, and mixing mills, (P.), B., 658.
- Wassermann, A., mechanism of additions to double linkings. I. Thermochemistry and kinetics of a diene synthesis. II. Steric course of two diene syntheses, A., 938, 1500. Specificity of iron as a catalyst for the reaction between hydrogen peroxide and pyrogallol, A., 940.
- Wassermann, G., transformation processes in β -aluminium bronze, A., 23. Transformations in eutectoid alloys, A., 291.
- Wasson, J. I. See Standard Oil Development Co.

- Wataghin, G., relativistic quantum electrodynamics and radiation emission on collision of electrons of high energy, A., 139. Thermal equilibrium of elementary corpuscles, A., 679. Theory of protons and neutrons, A., 1439.
- Watanabe, Kaichiro, significance of bile acids in carbohydrate metabolism. XXI. Glycolysis and degradation of glycogen in liver and muscle following administration of cholic acid and adenylypyrophosphoric acid, A., 111. Influence of adenylic and cholic acids and secondary phosphate on liver-glycogenesis, A., 1151. Influence of bile acids on phosphorylation of adenylic acid in liver and muscle, A., 1158. Bile acids of *Mugil cephalus*, Linn., A., 1524.
- See also Iwato, M.
- Watanabe, Koichi. See Okada, S.
- Watanabe, Koki, effect of various therapeutic agents, especially of the caffeine group, on bacterial agglutination, A., 900.
- Watanabe, M., cellulose resources. II. Properties of *a*-celluloses from various plants, A., 1435.
- See also Shikata, M.
- Watanabe, Seiichi. See Sata, N.
- Watanabe, Susumu, Morikawa, Kiyoshi, and Igawa, S., synthesis of benzene from carbon monoxide by catalytic reduction under atmospheric pressure. III. Influence of gas-velocity. IV., B., 484, 887.
- Watanabe, Tetsu. See Terada, T.
- Watanabe, Tokunosuke, crystal structure of sulphohalite, A., 286.
- See also Nitta, I.
- Watatani, M., corrosion of crucibles for glass making; corrosion experiments on barium crown glass, B., 849.
- Watchorn, E., and McCance, R. A., inorganic constituents of the cerebrospinal fluid. VI. Sulphur, A., 1399.
- Watenpaugh, J. T. See Morgan, A. F.
- Waterhouse, E. F. See Schoeller, W. R.
- Waterlow, E. O., [underfed mechanical stoker for] furnaces, (P.), B., 659.
- Waterman, H. I., explosion of ethylene, B., 835.
- and Dazert, A. A. H. E., construction of evaporators, B., 1.
- and De Kok, W. J. C., preparation of styrene, A., 74.
- De Kok, A. J., and Leendertse, J. J., polymerisation of isobutylene with alumina on silica gel as a catalyst, and addition of hydrogen chloride to the reaction products without catalyst, A., 192.
- De Kok, W. J. C., and Veldman, A. R., odorless bakelite products, B., 69.
- and Leendertse, J. J., physical constants of the polymerisation products of unsaturated hydrocarbons, A., 469. Specific refraction in predicting the composition of saturated synthetic hydrocarbon mixtures, A., 1479.
- Leendertse, J. J., and Colthoff, P. J. G., preparation of synthetic resins from vinyl chloride, B., 1103.
- Leendertse, J. J., and Ligtenberg, H. J., synthetic resins from hydrocarbons, B., 735.
- Leendertse, J. J., and Moklazingal, W., polymerisation of pentenes, A., 325.
- Leendertse, J. J., and Neut, G. van der, specific refraction and other physical constants in connexion with destruction of mineral oils, B., 980.
- Waterman, H. I., Leendertse, J. J., and Pooten, A. C. ter, polymerisation of cyclohexene, A., 480.
- Max, C. G. H., and Leendertse, J. J., rubber, suitable for production of films and threads, from plastic materials, B., 70.
- Van Vlodrop, C., and Veldman, A. R., preparation of mixtures of phenolic resin and rubber, B., 1152.
- and Waesberghe, F. A. M. J. S. van, preparation of wort and of beverages by fermenting this wort, (P.), B., 1160.
- See also Heertjes, P. M., and Vlугter, J. C.
- Waterman, J. E., cane-juice clarification with salfosol in Java, B., 1014.
- Waterman, R. E., Koch, F. C., and McMahon, W., chemical studies of wood preservation. III. Analysis of preserved timber, B., 62.
- and Williams, R. R., chemical studies of wood preservation. IV. Small-sampling method of evaluating wood preservatives, B., 62.
- See also Williams, R. R.
- Waters, R. M. See Orcutt, F. S.
- Waters, W. A., electrostatic factors affecting acidity and chemical reactivity, A., 308.
- Waterton, S. C., and Turner, W. E. S., properties of mixed alkali-lime-silica glasses containing lithia, soda, potash, and rubidia, B., 404.
- Watkins, C. M., and Butterworth, B., absorption of water by clay building bricks and some related properties, B., 24.
- Watkins, G. B., and Libbey-Owens-Ford Glass Co., safety glass, (P.), B., 851. Laminated glass, (P.), B., 851, 902, 949.
- Watkins, W. See Manchester Dyers (1914), Ltd.
- Wats, R. C., and Ghosh, B. N., detection and determination of atebirin in urine, A., 655.
- Watson, Cecil J., crystalline stercobilin, A., 774. Naturally occurring porphyrins. I. Isolation of coproporphyrin-I from urine in atophan cirrhosis. II. Isolation of a hitherto undescribed porphyrin occurring with an increased amount of coproporphyrin-I in faeces in familial haemolytic jaundice. III. Coproporphyrin-I from faeces in untreated cases of pernicious anemia, A., 887.
- Watson, Cyril J., Muir, G. W., and Davidson, W. M., digestibility studies with ruminants. I. Plane of nutrition and digestibility of hay, B., 699.
- Watson, E. A. See Lucas, Ltd., J.
- Watson, F., jun., origin of tektites, A., 1102.
- Watson, F. J., absorption of ammonia in boric acid, A., 718.
- Watson, H. B., Nathan, W. S., and Laurie, L. L., acidities of ketones and mechanism of prototropic change, A., 569.
- See also Dippy, J. F. J., Evans, D. P., and Morgan, V. G.
- Watson, J., rotary or semi-rotary furnaces for melting metals, (P.), B., 154.
- Watson, J. A., colour reactions in micro-chemical determination of minerals, A., 596.
- Watson, J. H. See Watson, Ltd., R. & W.
- Watson, J. R., termites and ants in banked [citrus] trees, B., 1158.
- Watson, K. M., and Wirth, C., routine high-vacuum distillation of oils; apparatus and conversion chart, B., 259.
- See also Universal Oil Products Co.
- Watson, R. H., determination of muscle-haemoglobin, A., 1397.
- Watson, R. O., forced circulation in vacuum pans [for sugar boiling], B., 201.
- Watson, S. J. See Allen, L. A.
- Watson, T. F. See Loomis, F. W.
- Watson, W., and Craddock, Q. L., burning process in Portland cement manufacture, B., 61. Hydration and hardening of calcium aluminates and silicates, B., 102. Comparison of Portland cement specifications of the world, B., 228, 455. Hydration, setting, and hardening of Portland cement, B., 228. Setting time of Portland cement, B., 455. Deterioration of concrete structures in alkaline and sea-water, B., 592. "False" set of Portland cement, B., 725. Deterioration of Portland cement concrete, B., 805. Fineness of Portland cement, B., 902. Chemical considerations underlying the manufacture of Portland cement, B., 993.
- See also Scouller, W. D.
- Watson, W. H., and Hurst, D. G., hydrogen discharge tube for absorption spectroscopy, A., 1340.
- Watson, W. W., spectra of CaH and CaH², A., 279. Band spectrum of barium hydride at 10,000 Å., A., 427.
- See also Frederickson, W. R.
- Watson, Ltd., R. & W., Anderson, H. E., and Watson, J. H., treatment of paper webs, (P.), B., 765.
- Watt, A. J. See Franks, W. R.
- Watt, G. W., and Fernelius, W. C., metal salts of diazoaminobenzene, A., 338.
- Watt, H. E. See Barger, G.
- Watter, O., pigment papers, B., 750.
- Watts, A. S. See Llewellyn, E. F.
- Watts, G. W. See Standard Oil Co.
- Watts, J. T. See Bramley, A.
- Watts, O. P., voltaic couples and corrosion, B., 231. Effect of arsenic on corrosion of iron by sulphuric acid, B., 498.
- Watts, R. N. See Standard-I.G. Co.
- Watzek, H. See Krumholz, P.
- Watzlawek, O. See Leipert, T.
- Waud, R. A., pharmacological action of the alkaloids of fumaraceous plants. II. Corydine, A., 1410.
- Waugh, G. P. See Coleman, G. H.
- Waung, L. C., oily product from the Chinese insect drug, chinhsiang-chung (*Aspongopus chinensis*, Dallas), B., 1164.
- Way, K., and Arthur, J. M., spectrographic determination of calcium in plant ashes, A., 1179.
- Way, T. H. See Gill, A. F.
- Wayne, E. J., clinical observations on two pure glucosides of digitalis, digoxin and digitalinum, A., 655.
- Waynick, D. D., anhydrous ammonia as a fertiliser, B., 422.
- Wear, J. H. See Cohn, E. J., and McMeekin, T. L.
- Weaton, G. F., and St. Joseph Lead Co., furnace structure, (P.), B., 530. Pyro-electric metallurgical furnace and process [for zinc recovery from ores], (P.), B., 1051.
- See also Isbell, W. T.
- Weaver, E. A., and Technicolor, Inc., colour photography, (P.), B., 430.

- Weaver, F. D., type-metal alloys, B., 552.
 Weaver, J. C. See Cass, F. H.
 Weaver, J. E., Hough, V. H., and Weldon, M. D., relation of root distribution to organic matter in prairie soil, B., 516.
 and Kramer, J., relative efficiency of roots and tops of plants in protecting the soil from erosion, B., 1110.
 Weaver, R., and Fifield, C. C., mixing-time experiments with flours milled from different classes of wheats, B., 651.
 Webb, B. H., preservation of fresh whole milk, (P.), B., 522. Colour development in lactose solutions during heating, with special reference to colour of evaporated milk, B., 571.
 and Hall, S. A., physical effects of freezing on milk and cream, B., 873.
 Webb, G. F. See Mathers, F. C.
 Webb, G. M., elastic scattering of electrons in argon and krypton, A., 557. Elastic scattering of electrons in molecular hydrogen, A., 557.
 Webb, H. A. See Herndon, T. C.
 Webb, H. W. See Boggs, (Miss) E. E., and Randall, R. H.
 Webb, J. A., and Webb Belting Co., Inc., J. A., belt dressing, (P.), B., 85.
 Webb, R. W., tetradymite from Inyo Mountains, California, A., 956.
 Webb, W. L. See Bedford, M. H.
 Webb Belting Co., Inc., J. A. See Webb, J. A.
 Webber, C. S. See Eastman Kodak Co.
 Webber, H. A., production of oxalic acid from cellulosic agricultural materials, B., 1062.
 Webber, I. E., histological characteristics of plants grown in toxic concentrations of boron, A., 1042.
 Weber, A. L. See Russell, W. C.
 Weber, A. P. See Olivier, S. C. J.
 Weber, C. G., relation of paper properties to register in offset lithography, B., 223. Fibre building boards, B., 950. Expansion and treatment of offset papers, B., 1040.
 Shaw, M. B., and O'Leary, M. J., suitability of sweet-potato starch for beater sizing of paper, B., 1039.
 See also Zimmerman, E. W.
 Weber, C. J., isolation of glycoeyamine from urine, A., 379.
 Weber, F. J., electrodeposition of chromium from aqueous chromic acid solutions, B., 413.
 Weber, H. C. See Universal Oil Products Co.
 Weber, H. H. R., and King, C. G., specificity and inhibition characteristics of liver-esterase and pancreas-lipase, A., 403.
 Weber, I., Posen, E. J., and Ceboolsky, N. G., effect of asparagine on reducing power of fructose, A., 329.
 Weber, I. B., and Woodhall, W., titanium pigments and their use in papermaking, B., 959.
 See also Laporte, Ltd., B.
 Weber, J., Zeerleder, A. von, and Treadwell, W. D., electrolytic extraction of pure aluminium, (P.), B., 107.
 Weber, K., and Norddeuts. Asbest- & Gummiwerke G.m.b.H., non-conducting covering for sound, (P.), B., 806.
 Weber, K. (Zagreb), inactivation of activated molecules, A., 284. Water effect in infra-red plates, A., 311. Deactivation of chemically activated oxalic acid, 11., A., 588. Theory of desensitisation and the Herschel effect, A., 1331.
 Weber, L. J. See Aluminum Co. of America.
 Weber, M., jun. See MacMullin, R. B.
 Weber, N., and Leach Co., C. H., oil-refining apparatus, (P.), B., 893.
 Weber, P. See Hass, H. B.
 Weber, R. See Schild, E.
 Weber & Co., Zweigniederlassung der L. Soest & Co., m.b.H. zu Düsseldorf-Reisholz, R., hardening of steels, (P.), B., 66.
 Weber-Molster, C. C. See Schmidt, O. T.
 Weber-Schäfer, M. See Elöd, E., and Minkowski, R.
 Weberling, H., [ensuring correct registration in] colour photography, (P.), B., 1070.
 Webre, A. L., design and use of pan-control instruments [in the sugar industry], B., 1159.
 Webre, J. B. See Texas Co.
 Webster, D. E., and Norton Co., an article of shellac-bonded abrasive material, (P.), B., 407. Rubber-bonded abrasive articles, (P.), B., 950.
 Webster, D. L., Hansen, W. W., and Duveneck, F. B., ionisation area of Hc, and Bethé's theory, A., 804.
 Pockman, L. T., and Kirkpatrick, P., probabilities of L ionisations of An by cathode rays, A., 138.
 See also Pockman, L. T.
 Webster, D. M., oil-resisting rubber, B., 34.
 See also Scott, J. R.
 Webster, J. H. See Green & Co. (Ecclesfield), Ltd., W.
 Webster, K. C. See Cox, E. G.
 Webster, L. A., Wahl, M. H., and Urey, H. C., fractionation of oxygen isotopes in an exchange reaction, A., 593.
 Webster, M. D., Engel, F. L., Laug, E. P., and Amberson, W. R., influence of pH on elimination of haemoglobin by the perfused frog's kidney, A., 878.
 See also Bernheim, F.
 Webster, R. L., and Marshall, James, position of nicotine in codling-moth control, B., 326.
 Webster, T. A. See Rosenheim, O.
 Wechsberg, R. See Klemenc, A.
 Wechter, E. J., and Louisville Cement Co., cement, (P.), B., 62.
 Weckel, K. G., and Jackson, H. C., irradiation process successfully applied to evaporated milk, B., 1066.
 See also Elvehjem, C. A.
 Wecker, J., and Nipper, H., lead bronzes with special reference to manganese as an alloying element, B., 856.
 Weckerle, H., coloration of glasses by copper, selenium, and sulphur, B., 22.
 Wedekind, E., asymmetric nitrogen atom. LX. Optical activity of ammonium salts as a means of detection of double decomposition in non-ionising solvents, A., 202. Colloid lake at Witzhausen a.d. Werra, A., 322. Benzene-azolinin and the phenolic nature of "dioxan-lignin," A., 491.
 See also Aumüller, W., and Jessen, V.
 Wedemann, W. See Beller, K.
 Wedge, U., mixing of paint, etc., (P.), B., 642.
 Wedger, W. H., and Boston Blacking & Chem. Co., securing together parts of shoes, etc., pieces of stock [with nitrocellulose cement], (P.), B., 281.
 See also Bacon, F. S.
 Wedlock, A. W. H., and Mycalex (Parent) Co., Ltd., vitreous material, (P.), B., 902.
 Wedmore, E. B. See Thomas, A. M.
 Weduwen, A. J. der, initiation of explosion in detonating explosives, B., 879.
 Weech, A. A., Goettsch, E., and Reeves, E. B., nutritional oedema in the dog. I. Development of hypoproteinemia on a diet deficient in protein, A., 1269.
 Weekers, R., renal origin of albuminuria in nephritis produced by uranium nitrate, A., 247. Sugar metabolism in experimental nephritis from uranium nitrate, A., 650. Uranium glycosuria: its modifications in experimental hypoglycemia from insulin, A., 650.
 Weekes, E. V. See Barnett, E. de B.
 Weeks, M. E., scientific contributions of Don Andrés Manuel Del Rio, A., 1099. Discovery of tellurium, A., 1343.
 See also Caldwell, J. M.
 Weerden, W. J. van. See Beintema, J.
 Wegelius, E., qualities of bakelite-treated wood, B., 852.
 Wegener, W., electrolytic destruction of direct-current tramway-feeder cables, B., 681.
 Weger, N., improvements in technique of counting small ions, A., 320.
 Wegler, R., and Frank, W., isomerides and derivatives of hexetone, A., 1498.
 and Rüber, A., asymmetric reactions. IV. Causes of optical selectivity in reactions with optically active catalysts, A., 972.
 and Ruzicka, A., enamine form of Schiff's bases, A., 978.
 Wegmann, T. See Freudenberg, K.
 Wehage, K. See Wolf, K. L.
 Wehe, H. G. See Western Electric Co.
 Wehmeier, E. See Fischer, F. G.
 Wehmhoff, B. L., evaluation of printing quality of paper, B., 400.
 Wehner, G. See Le Blanc, M., and Wartenburg, H. von.
 Wehrheim, O., Heskamp process for injection of dust charges into blast furnaces, B., 309.
 Wehrle, P. W., and Strom, C. O., mechanised buhrstone dressing [for paint], B., 160.
 Wehrli, M., indium isotope 113, A., 558.
 and Miescher, E., spectroscopic investigation of indium halide vapours and gallium halide vapours, A., 144.
 Wehrli, S., apparatus for unipolar micro-electrolysis, A., 722.
 Wei, C. T., *Rhizoctonia*, sheath blight of rice, B., 822.
 Wei, N. S., and Chin, K. S., diastatic activity of *Aspergillus*, A., 1419.
 Wei, P. H., Anderson, P. A., and Hsieh, Y. M., chemical decomposition of silver oxide by slow electrons, A., 713.
 Weibel, R. See Cherbuliez, E., and Gutzeit, G.
 Weibke, F., phase diagram of the system copper-gallium, A., 22.
 and Eggers, H., phase diagram of the system copper-indium, A., 22. Diagram of state of the system silver-indium, A., 576.
 and Laar, J. [with Meisel, K.], lower sulphides of palladium; equilibrium diagram of system Pd-PdS, A., 1322.
 See also Biltz, W.
 Weichert, R. See Euler, H. von.
 Weichmann, H. K., photographic plates for scientific photography, B., 750.
 Weicker, B., metabolic action of strophanthin on the warm-blooded heart, A., 1018.

- Weidenbaum, B. See Stewart, T. D.
- Weidenhagen, R., and Herrmann, R., preparation of methylglyoxaline from carbohydrates. I, A., 501. Synthesis of glyoxaline derivatives, A., 1380, 1507.
- and Korotkyj, B., preparation of alkoxy-methylfurfuraldehydes and alkyl laevulates from carbohydrates. II, A., 497.
- Weider, O., hydrolysis of betaine hydrochloride in aqueous solution and determination of the acidic dissociation constants of the betainium ion, A., 582. Determination of the second dissociation constant of carbonic acid, A., 1203.
- Weidinger, A. See Katz, J. R.
- Weidle, H. See Kunz, K.
- Weidmann, H. See Girssewald, C. von.
- Weidner, C., disinfectants and plant protectives, (P.), B., 518.
- Weigelt, G., sources of error in flour ashing, B., 697.
- Weiger, J. A., and Mallory & Co., Inc., P. R., electrical make-and-break [tungsten] contacts, (P.), B., 682.
- Weigert, F., colloidal electrolytes in photography, A., 311. Micellar theory of the latent image, A., 832.
- Weigert, J., and Fürst, F., fermented manure and ordinary stall manure, B., 165.
- Weigle, J., molecular field of liquids, A., 1449.
- and Huber, F., transformation of NH_4Cl at -30° , A., 433.
- and Luthi, R., negative results in variation of dielectric constant, A., 431.
- and Saini, H., thermal expansion of calcite, A., 21. Transformation of NH_4Br near -40° , A., 433. Structure of ammonium bromide at low temperatures, A., 570.
- Weil, L., arginase activation, A., 1026.
- See also Linderstrom-Lang, K., and Schroeder, E. F.
- Weil, R. See Chretien, A.
- Weil, S., and Marcinkowska, H., condensation of *o*-phenylenediamine with benzaldehyde, A., 358.
- and Rozenblumówna, S., amide of nor-codeine-*N*-carboxylic acid, A., 367.
- Weil-Malherbe, H., and Krebs, H. A., metabolism of amino-acids. V. Conversion of proline into glutamic acid in kidney, A., 1272.
- Weiland, H. See Alten, F.
- Weiland, H. J. See Du Pont de Nemours & Co., E. I.
- Weilandt, W., utilisation of moorlands and peat coking, B., 1079.
- Weilenmann, determination of humidity of raw, boiled, and loaded silk, B., 445.
- Weiler, J., Smekal-Raman effect in inorganic substances, A., 428. Distribution of intensity in the Rayleigh lines of compressed gases. I. Experiments with carbon dioxide, A., 1190.
- Weiler, J. F., reaction of bromine with a coking coal, including a study of its unsaturation, B., 884.
- Weill, P. See Tiffeneau, M.
- Weinbach, A. P., micro-determination of sodium, A., 1044.
- and Calvin, D. B., reducing powers of physiologically-important carbohydrates, A., 847.
- Weinbaum, S., normal state of the helium molecule ion, He_2^+ , A., 1294.
- Weinberg, M., and Guelin, A., culture of anaerobic bacteria in non-regenerated media with the addition of extracts of embryonic cells, A., 1282.
- and Guillaumie, M., preparation of antivibrioseptic serum by suspension of the antigen in lanolin, A., 1003.
- Weinberger, M., apparatus for gasification of chemicals for air purification in closed rooms, (P.), B., 480. Purification of foul air in enclosed spaces, (P.), B., 480.
- Weiner, P. See Zárdy, J.
- Weiner, R., electrodeposition of lead from perchloric acid solution, B., 906.
- [with Kaiser, F.], electro-analytical determination of zinc in presence of iron, A., 596.
- Weingaertner, E. See Berl, E.
- Weingand, R., manufacture of capsules for sealing bottles from viscose, cellulose acetate, and gelatin, B., 446.
- and Seiberlich, J., increasing moisture-proof qualities of sheets of organic matter, (P.), B., 1139.
- Weinig, A. J., Cuthbertson, R. E., and Cuban-Amer. Manganese Corp., concentration of manganese ores, (P.), B., 595.
- Weinland, C. E., [uses of] *p*-phenylenediamine [in developers], B., 574.
- Weinmiller, L., feeding trials with fowls, B., 699.
- Weinreb, F. See Worssam & Son, G. J.
- Weinstock, H. H., jun. See Fuson, R. C.
- Weinstock, N., fermentation-inhibiting substance produced by *B. coli*, A., 787.
- Weinzedl, F., paragenesis of the Trafoß serpentine reaction aureole, A., 61.
- Weir, H. M., and Atlantic Refining Co., liquid-vapour contacting apparatus, (P.), B., 1076.
- Weiser, H. B., and Milligan, W. O., X-ray studies on hydrous oxides. V. β -Ferric oxide monohydrate. VI. Alumina hydrates. VII. Ferric oxide, A., 285, 433.
- Weiss, C. See Fränz, H.
- Weiss, C. R., and Bennett, W. R., delustring of fabric, (P.), B., 98.
- Weiss, E. See Freudenberg, K.
- Weiss, H., pseudo-plasticity in mineral oils, B., 1125.
- Weiss, J., electron transfer processes in the mechanism of oxidation-reduction reactions in solution, A., 454. HIO_3 radical in solution, A., 582. Electron affinity of the radicals HO_2 and OH , and the oxygen molecule, A., 1058. Occurrence of a metastable, active oxygen molecule in sensitised photo-oxidations, A., 1211. Catalytic decomposition of hydrogen peroxide on metals, A., 1467.
- See also Haber, F., Hughes, E. D., Juliusburger, F., and Walker, O. J.
- Weiss, J. E., and Rettger, L. F., *Lactobacillus bifidus*, A., 255.
- Weiss, K., effect of hardness on use of [boiler] feed-water, B., 129.
- Weiss, M., uroerythrin, A., 1524.
- Weiss, P., equation of state of liquids; negative internal pressure at high temperatures, A., 1064.
- See also Urbain, G.
- Weiss, R., and Chledowski, L., cyclic compounds from aromatic diamines and chloral, A., 753.
- and Ebert, Josef, transformation of dialkylidene-cyclohexanones into the corresponding dialkylphenols. I. Dibenzylidene-cyclohexanone to 2:6-dibenzylphenol, A., 855.
- Weiss, R., and Koltjes, J., derivatives of 1:4-di-*a*-naphthyl-naphthalene, A., 748.
- and Müller, Fritz, triphenylmethanes with linked benzene rings. VIII. Reduction products of trimethylene-triphenylmethane triketone, A., 205.
- Weiss, S., and Ellis, J. B., oxygen utilisation and lactic acid production in the extremities during rest and exercise in subjects with normal and in those with diseased cardio-vascular systems, A., 775.
- Weissberg, S. G. See Kruger, P. G.
- Weissberger, A., autoxidation processes. VIII. Steric hindrance in oxidation and racemisation of α -ketols, A., 494. Structure of tolan, A., 967.
- and Bach, H., autoxidation processes. IX. Electrolytic dissociation of α -ketols, A., 494.
- Bach, H., and Strasser, E., 2-chloro-3:5-dinitro-4-chloromethyl- and 2:4:6-tribromo-3-bromomethyl-benzoic acids and attempts to resolve them, A., 341.
- and Sängewald, R., dipole moment and structure of organic compounds. XIV. Direction of the electric moment of the $\text{N}:\text{C}$ group, A., 976.
- Weissbrod, J. See Panli, W.
- Weissberg, K., corrosion [in petroleum stills], B., 438.
- Weissenberg, E. See Laszlo, D.
- Weissflog, B., use of coal-tar products for insulating and luting in construction work, B., 1028.
- Weisskopf, V., polarisation of electrons when scattered by crystals, A., 557. Problems of the new quantum theory of the electron, A., 1294.
- Weitendorf, K. F. See Jander, W.
- Weith, G. S., and Bakelite Corp., mouldable [phenolic] resinoid, (P.), B., 816.
- Weithofer, K. A., occurrence of petroleum, natural gas, iodised and sulphurated waters in South Bavaria, A., 956.
- Weitz, E., Schobert, H., and Seibert, H., action of alkaline hydrogen peroxide on quinones and polyhydric phenols, A., 982.
- Weitzel, C. F., Potts, H. G., and Underwood, J. E., chlorination of wood pulp and similar materials, (P.), B., 448.
- Weizäcker, C. F. von, nuclear masses, A., 1297.
- Weizmann, (Miss) A. See Bergmann, E.
- Weizmann, C. See Henri, V.
- Weizmann, M., and Haskelberg, L., acetylated sugars with a free α -position, and synthetic experiments with 2:3:4:6-tetra-acetylglucose and similar compounds, A., 1108.
- Wejćówna, F. See Bekier, E.
- Welch, A. D., adrenaline oxidation and stabilisation, A., 127.
- and Roepke, M. H., choline and certain of its derivatives. I. Pharmacological activity of acetylphosphocholine and acetylarsenocholine relative to acetylcholine, A., 1411.
- See also Heard, R. D. H.
- Welch, R. C., and Doan, F. J., heat-stability of evaporated milk made from hard- and soft-curd milks and milk from mastitis-infected udders, B., 873.
- Welch Manufacturing Co., W. M. See Youden, W. J.
- Welcher, F. J., and Briscoe, H. T., dissociation constants of mono- and trichloroacetic acids in ethyl alcohol, A., 302.
- Weld, C. B. See Sykes, J. F.
- Weldon, M. D. See Weaver, J. E.

- Wellard, R. See Mondain-Monval, P.
 Weller, G. See Binet, L.
 Weller, J. R., and Allison, R. V., machine for sub-surface treatment of soils with chloropierin and with carbon disulphide for nematode control under field conditions, B., 965.
 Wellings, A. W., direct titration of soluble orthophosphates with lead acetate in presence of dibromofluorescein as adsorption indicator, A., 836.
 Wellisch, D., manufacture of superphosphate and similar products, (P.), B., 849.
 Wellm, J., surface tension of binary liquid mixtures; system anilino-cyclohexane, A., 438.
 Wellman Smith Owen Engineering Corporation, Ltd., and Purves, G. T., [side-tip] coke-quenching waggons, (P.), B., 1084.
 Wellmann, O. See Marek, J.
 Wells, A. F. See Powell, H. M.
 Wells, C. G. See Walker, J. P.
 Wells, D. A. See Balinkin, I. A.
 Wells, H. S., Miller, D. G., and Drake, B. M., validity of rapid determinations of the osmotic pressure of protein solutions, A., 879.
 See also Youmans, J. B.
 Wells, J. H. See Bircher, J. R.
 Wells, M. T., Goldman, J. H., and Goldman, J., filter pad, (P.), B., 4, 755*.
 Filtering of fluids, (P.), B., 435, 755*.
 Wells, R. C., thermal decomposition of carbonate minerals, A., 323.
 and Stevens, R. E., determination of common and rare alkalis in mineral analysis, A., 54.
 Wells, S. D., apparatus for treating fibrous material, (P.), B., 96. Paper stock treatment, mixing, and beating with rods, B., 489.
 and Alsted, L. L., removal of printing ink from paper, (P.), B., 897.
 Cramer, W. B., and Alsted, L. L., purification of de-inking wastes and other industrial effluents, (P.), B., 1005.
 Wells, W. F. See Fair, G. M.
 Wells, W. H., scattering of protons on protons, A., 802.
 Welo, L. A., humidity-resistance relations in carbon-coated hygroscopic materials, B., 96.
 Welsch, H., distribution of water, dry matter, and nitrogen during germination of *Impatiens balsamina*, L., A., 419.
 Welsh, H. D. See Hendrick, J.
 Weltner, M. See Rosenthal, E.
 Welty, J. C. See Allee, W. C.
 Weltzien, W., artificial silk, B., 666.
 and Rhein, W., effect of temperature and humidity on absorption of moisture by fibrous materials, B., 536.
 Welwart, tooth pastes and powders dissolving dental tartar, B., 1168.
 Wempe, B., production of beryllium, (P.), B., 909.
 Wen, S. H. See Ho, K.
 Wenck, P. R. See Prill, E. A.
 Wendeborn, H. See Metallges. A.-G.
 Wendel, F., sulphuric acid requirement in the mashing of rye, B., 569.
 Wendel, W. B., methylene-blue, methaemoglobin, and cyanide poisoning, A., 1160.
 Wendel & Co., F., Petits Fils de, explosive and cartridge containing liquid air or liquid oxygen, (P.), B., 479.
 Wenderlein, H. See Stern, A.
 Wendling, A. V. See Barnes, W. H.
 Wendling, T. See Gault, H.
 Wendt, A., and Heun, H., quantitative emission spectrum analysis, A., 315.
 Wendt, H., carotene and vitamin-A metabolism, A., 1545.
 and Schroeder, H., antagonism of vitamin-A and -C, A., 1174.
 Wenger, P., Cimerman, C., and Rzymowska, C. J., gravimetric micro-determination of potassium in presence of sodium by chloroplatinic acid, A., 1472. Volumetric micro-determination of potassium in blood-serum, A., 1519.
 Cimerman, C., and Wyszewianska, M., micro-determination of cadmium by means of 8-hydroxyquinoline, A., 1473.
 Gutzeit, G., and Hiller, T., electrolytic attack of opaque minerals and its application to the technique of "prints" of polished surfaces, A., 463.
 See also Cimerman, C.
 Wenholz, H., quality of Australian wheat and its improvement. I. General considerations. II. Influence of climate on quality. VII. Breeding wheat for improved quality, B., 1065.
 and Macindoe, S. L., quality of Australian wheat and its improvement. III. Need for improvement in baking quality, B., 1065.
 See also Griffiths, B.
 Wenigerówna, B. See Kemula, W.
 Wenker, H., indicator properties of di-nitroaniline azo-dyes, A., 315. Electrolytic reduction of imido-ethers, A., 742. Synthesis of Δ^2 -oxazolines and Δ^2 -thiazolines from *N*-acyl- β -aminoethyl alcohols, A., 995.
 Wens, G. See Endell, K.
 Wense, T., colloidal changes indicated by experiments on *Paramacia* as the basis of sympathetic nervous processes, A., 1539.
 Wensel, H. T. See Roeser, W. F.
 Went, F. W., pea test method for auxin, the plant growth-hormone, A., 131.
 Went, J. J. See Ornstein, L. S.
 Went, S., and Kúthy, A. von, rôle of serum-lipins. I. Physico-chemical study, A., 373.
 Wentrup, H., system iron-phosphorus-oxygen, A., 1077.
 See also Lucas, O.
 Wentworth, H. A., preservation of raw fish liver, (P.), B., 972.
 Wentzel, G., stability of the proton and neutron, A., 278.
 Wentzky und Petersheyde, D. von. See Pawletta, A.
 Wenusch, A., nicotine in tobacco, A., 422. Fate of nicotine in fresh liver, A., 1015. Theoretical basis of determination of distribution of nicotine in cigarette smoke, B., 174. Exhaustive distillation of tobacco does not cause liberation of more nicotine, B., 205. Differentiation of acid and alkaline varieties of tobacco, B., 381. Resins in tobacco smoke, B., 429. [Composition of] tobacco smoke, B., 606. Composition of solids formed by heating tobacco, B., 782.
 and Schöller, R., composition of tobacco smoke, B., 381.
 Wenzel, F. See Guttman, A., and Jusatz, H. J.
 Wenzel, I. See Storch, K.
 Wenzke, H. H. See Otto, M. M., Tousseint, J. A., and Wilson, C. J.
 Wenzl, H., oil vesicles in the corky tissue of *Plectranthus fruticosus*; a case of high membrane elasticity, A., 671.
 See also Schwalbe, C. G.
 Werdenberg, H. See Rupe, H.
 Werder, F. von. See Dalmer, O.
 Werder, J. F., and Rogers, E., lubricating oil, (P.), B., 759.
 Werking, L. C. See Broadwell, B. E.
 Werkman, C. H. See Calloway, N. O., Osburn, O. L., Reynolds, H., and Wood, H. G.
 Werkspoor, N. V. See Bonath, R.
 Werle, E. See Kraut, H.
 Werley, G. L. See New Jersey Zinc Co.
 Werner, A., mineral content of German feeding-stuffs and effect of manuring and of origin thereon, B., 285.
 See also Hardtmann, M.
 Werner, A. A., experiment to produce lactation in castrate women, A., 1426.
 Werner, E. See Spengler, O.
 Werner, Eugen, solution of nickel anodes, B., 1147.
 Werner, F., meadow-manuring trials in Quartino (Tessin), B., 602.
 Werner, G. See Parhon, C. I.
 Werner, H. (Altona), and Volger, H., detection of rye and wheaten flour in mixed flour by means of the trifructosan content, B., 872.
 Werner, H. (Leipzig). See Treff, W.
 Werner, Hans. See Schmalz, H.
 Werner, Heinrich. See Hahn, G.
 Werner, H. O., effect of a controlled nitrogen supply with different temperatures and photo-periods on the development of the potato plant, A., 1178.
 Werner, H. W., volatile oil of *Hyptis mutabilis*, A., 797.
 Werner, O., connexion between the emanating power of radium-containing metals and the characteristic properties of these metals, A., 1048. Arrangement for automatic, continuous change of temperature of the electric furnace, B., 67. Use of radioactive alloys in the study of metals, B., 232.
 and Seiftner, V., chemical effects of radioactive rays, A., 832.
 Werner, W. S. See Poole, C. A.
 Wernick, S., electroplating, B., 28. Cleaning of metals. VI. Degreasing by means of organic solvents, B., 154. Anodic oxidation of aluminium and its alloys, B., 502. Specification of electrodeposited coatings. II. Anodic deposits, zinc and cadmium. III. and IV. Cathodic deposits, with particular reference to nickel and chromium, B., 730, 772, 905. Factors affecting structure and grain size of electrodeposited cadmium, B., 998.
 Wernicke, E. A., production of sulphonation products from mineral oil, tar oils, etc., rich in sulphur, (P.), B., 937.
 Wernicke, R., crystallisation of serralbumins, A., 1142.
 Wernitz, J. H., addition of carboxylic acids to vinylacetylene, A., 472.
 See also Du Pont de Nemours & Co., E. I.
 Wert, L. R. van. See Gonser, B. W.
 Wertenstein, L., vapour pressure and condensation of radon at low temperatures, A., 925.
 See also Danysz, M.
 Werthan, S., pigments recently offered the [paint] industry, B., 815. Zinc pigments in relation to southern [American] climatic conditions, B., 959.

- Wertheim, E., ethoxybenzylcarbamides, A., 614.
- Wertheim, H. See Liebesny, P.
- Wertheimer, E., gas laws, Wien's displacement law, and the radiation law of the gaseous state, A., 1298.
- See also Abderhalden, E.
- Wertz, W., separation of molybdenum in alloy steels, especially from tungsten, and its potentiometric determination, B., 458.
- Wescott, E. W. See Comstock & Wescott, Inc.
- Wesemann, F. See Drath, G.
- Wessel, W., classical analogue of electron spin, A., 138. Dirac's spin theory and non-linear field equations, A., 1298.
- Wessely, F., Dinjaski, K., Isemann, W., and Singer, G., bitter principles of the calumba root; columbin, A., 1432.
- Wesson, L. G., and Murrell, F. C., effect of hydrogenated fat on abnormal carbohydrate respiratory quotients of rats on a fat-deficient diet, A., 390.
- West, A. P. See Baens, L., and Yenke, F. M.
- West, C. See Kidd, F.
- West, C. D., orientation of crystallites in ignition products of $Mg(OH)_2$ and $Ca(OH)_2$, A., 17. Thermochemistry and physical properties of bromides and hydrosulphides, A., 918. Diffraction of X-rays by a linear crystal grating of $AgCN$, A., 1194.
- West, D. W. See Levy, L. A.
- West, E., lubricants and lubrication of textile fibres, B., 718.
- West, Ernest. See West, F. J., and West's Gas Improvement Co.
- West, E. S. See Kisner, P.
- West, F. J., West, Ernest, and West's Gas Improvement Co., retort settings for carbonisation of coal and similar carbonaceous materials, (P.), B., 87. Vertical retorts for continuous distillation of carbonaceous materials, (P.), B., 1125.
- See also West's Gas Improvement Co.
- West, L. B. See Wall, M. P.
- West, N. S. See Krueger, A. P.
- West, R. See Dakin, H. D.
- West, W., recent developments in cast iron, B., 150.
- West, William, use of the ortho-para-hydrogen conversion in the detection of free radicals produced in photodissociation, A., 1468.
- and Ginsburg, E., photo-decomposition of gaseous ethyl iodide and a comparison of photo-change in gaseous and condensed states, A., 178.
- West's Gas Improvement Co., Ltd., West, F. J., and West, Ernest, vertical retorts for carbonisation of coal and similar carbonaceous materials, (P.), B., 439.
- See also West, F. J.
- Westberg, T. See Tuschhoff, E.
- Westcott, C. H., and Bjerger, T., slowing down of neutrons by collisions with hydrogen nuclei, A., 426.
- See also Bjerger, T.
- Westcott, E. W., and Sulphite Corp., condensation of [liquid] sulphur, (P.), B., 100.
- Westcott, W. B. See Multigraph Co.
- Westen, H. A. van. See Vlугter, J. C.
- Westenbrink, H. G. K., adaptation of intestinal absorption to composition of ingested food, A., 522. Vitamin-B-sparing action of fat, A., 544.
- Westenbrink, H. G. K., permeability of the intestine *in vitro*, A., 1013. Tissue respiration in avitaminosis-B₁, A., 1035.
- Westerkamp, R. F. See De Jong, H. G. B.
- Western Bottle Manufacturing Co. See Teller, W. K.
- Western Brick Co. See Butterworth, F. W.
- Western Cartridge Co. See McBride, G. A., and Tibbitts, G. C.
- Western Electric Co., and Fruth, H. F., [hardening] treatment of metals [gold], (P.), B., 1051.
- and Heinicke, H. M. E., apparatus for handling molten metal, (P.), B., 413.
- Lewis, M. C., and Lynn, A. M., [silk] insulating materials, (P.), B., 943.
- and Magill, W. S., apparatus for adsorption, (P.), B., 1077.
- and Neighbors, C. C., magnetic bodies [permalloy dust cores], (P.), B., 275.
- and Scott, James W., refining of copper, (P.), B., 314.
- and Scott, W. J., ceramic-coated [ferrous] articles, (P.), B., 407. Ceramic material, (P.), B., 805.
- and Wehe, H. G., electrochemical production of articles [copper wires], (P.), B., 1000.
- Western Gas Construction Co. See Merritt, M. H.
- Western States Machine Co., filter sieve for use in filtration of liquid bodies carrying suspended solid material, (P.), B., 3. Automatically-timed centrifugal apparatus, (P.), B., 4. Filter sieves for use in filtration of liquid bodies carrying suspended solid material, (P.), B., 257.
- Western Union Telegraph Co. See Curtin, L. P.
- Westfall, B. B., Findley, T., and Richards, A. N., composition of glomerular urine. XII. Concentration of chloride in glomerular urine of frogs and *Necturi*, A., 235.
- Westgren, A. See Borén, B.
- Westinghouse Electric & Manufacturing Co., and Ellis, O. W., [phosphor-copper] solder, (P.), B., 505.
- and Elsey, H. M., [electrical] insulating liquid, B., 30. Insulating and cooling dielectric liquids for use in electrical apparatus, (P.), B., 508. Cooling and insulating dielectric liquids for use in electrical apparatus, (P.), B., 682.
- and Frey, A. A., purification of hydrogen [for bright annealing of metals], (P.), B., 629.
- and Horne, H. F., [coloured] laminated material, (P.), B., 111.
- Hunt, M. H., and Barrow, G. M., [porcelain] insulator, (P.), B., 1095.
- and Lowry, E. F., thermionic cathode, (P.), B., 911.
- and Mains, G. H., [water-resistant] coating compositions, (P.), B., 815. Laminated material, (P.), B., 1103.
- and Millis, W. T., cathode, (P.), B., 462.
- and Scott, H., [cobalt-nickel-iron] alloys [for sealing into glass], (P.), B., 106.
- and Stickney, F. S., liquid-testing device; [viscosimeter], (P.), B., 883.
- and Styer, C. A., analysis [of gases] employing photosensitive devices, (P.), B., 755.
- and Swinne, R., electric contact, (P.), B., 274.
- and Wilhelm, W. C., low-friction composition, (P.), B., 290.
- Westinghouse Lamp Co., and Driggs, F. H., doping of tungsten oxide, (P.), B., 991.
- Westinghouse Lamp Co., and Iredell, C. V., chromium-plating [tungsten or molybdenum wire], (P.), B., 506. [Electrical] contact material, (P.), B., 958.
- and Lindstrom, A. F., [electric] lamp coating, (P.), B., 108.
- Marden, J. W., and Lederer, E. A., production of active metals [in electron-discharge devices], (P.), B., 1053.
- and Rennie, R. F., glazing of refractory bodies, (P.), B., 1095.
- and Rentschler, H. C., photo-electric device, (P.), B., 30.
- Rentschler, H. C., and Henry, D. E., photo-electric tubes, (P.), B., 1053.
- Westman, Ltd., E. B. See Rhodin, J. G. A.
- Westmann, A., hormonal function of unfertilised egg, A., 260. Dependence of the function of the corpus luteum on the ovarian follicles and the place of origin of the hormone in the ovary, A., 1544.
- Westmeyer, H., hyperfine structure of the red Cd line λ 6438, and hyperfine structure of Sr, Sn, and Mg, A., 800.
- Weston, P. E. See Hass, H. B.
- Weston, W. A. R. D., and Booer, J. R., seed disinfection. I. Disinfectant dusts containing mercury, B., 1159.
- Westphal, U. See Butenandt, A.
- Westra, J. J. See Selle, W. A.
- Wetherbee, H. E., Grant, R. F., and Grant, B. H., method of etching glass surfaces, (P.), B., 804.
- Wetherell, S., assay of strong solution of lead subacetate, B., 205.
- Wetherill, J. P., magnesium-cobalt alloys, B., 808.
- and Hann, R. M., 2-methyl- and -ethyl-4-*p*-fluorophenylthiazoles and their derivatives, A., 1385.
- See also Hann, R. M.
- Wetlaufer, L. A., and Gregor, J. B., volumetric determination of evaporation rates, B., 1025.
- Wétroff, G. See Süe, P.
- Wetlaufer, W. L., crushers for stone, etc., (P.), B., 786.
- Wettstein, A. See Ruzicka, L.
- Wettstein, E. See Treudewell, W. D.
- Wetzel, R., Wollschitt, H., Ruska, H., and Oestreicher, T., protein, fat, and carbohydrate metabolism in the white rat. I. In the normal rat, A., 1152.
- Wever, F., X-ray analysis of deformation textures of metallic materials, A., 154.
- and Jellinghaus, W., resistance measurements of the rate of transition of austenite, B., 593.
- and Lange, Heinrich, magnetic study of self-hardening steels, B., 593. Influence of the arrangement of the sample on results of the Epstein test [for sheet iron], B., 676.
- and Pfarr, B., lattice parameter alteration of α -iron on charging with hydrogen, A., 570. Production of lattice distortions by cold-deformation, and their disappearance by crystal recovery and recrystallisation, B., 554.
- Wewers, H., determination of digestibility of proteins of blood meal and of fish meals rich in fat, B., 172.
- Weyde, E., luminescence of compounds of organic molecules with metallic salts when irradiated with X-rays, A., 1302. Fixing and stop-baths for [photographic] papers, B., 655. Possibility of improving the permanence of photographic prints, B., 701.

- Weyerhaeuser Timber Co. See Hatch, R. S.
- Weygand, C., arbitrarily induced crystallisation of melts, A., 1315.
- Koch, P., and Schächer, F., determination of constitution by morphological methods; direction of enolisation of keto-enols, A., 492.
- and Mensdorf, L. [with Strobelt, F.], chemical morphology in homologous series, A., 1369.
- and Schächer, F., influence of chemical nature and position of substituents on morphological relationship, A., 492.
- and Strobelt, F., chemical morphology in the benzene, thiophen, and furan series, A., 1377.
- Weygand, F. See Kuhn, R.
- Weyl, W., optical investigations of the constitution of glasses; transformation point and boric acid anomaly, A., 1189. Optical investigations on the constitution of solutions and glasses, A., 1200. Chemistry of coloured glazes, B., 674.
- and Thümen, E., constitution and colour of uranium glass, B., 404.
- See also Fischer, Hellmut.
- Weyrauch, F. See Schmidt, P.
- Whang, P. C. See Tang, P. S.
- Wharton, P. S. See Fay, M.
- Whattam, T. W., identification of dyes, B., 796.
- Wheat, W. N. See Friend, J. A. N.
- Wheatcroft, E. L. E., theory of the glow discharge, A., 1438.
- and Barker, H., development of a spark from a glow, A., 1438. Paschen's law at low striking potentials, A., 1438.
- Wheeler, A. See Pease, R. N.
- Wheeler, D. H. See Kilgore, L. B.
- Wheeler, J. A., and Bearden, J. A., variation of K resonating strength with atomic number, A., 8.
- and Breit, G., Li^+ fine structure and wave functions near the nucleus, A., 135.
- See also Breit, G., and Plesset, M. S.
- Wheeler, M. A. See Hanson, D.
- Wheeler, R. V., ignition of firedamp by compression, B., 483, 1124. Ignition of turbulent explosive mixtures by electric sparks, B., 708.
- See also Allsop, G., Guénault, E. M., Mott, R. A., and Naylor, C. A.
- Wheeler, T. S., liquids, A., 575. Theory of liquids. III. and IV., A., 1058, 1198. Temperature coefficients of surface tension and thermal expansion, A., 1070. Electrostatic potential of a crystal of the cuprite type, A., 1191.
- See also Acharya, B. G. S., Ferreira, B. F., Motwani, D. C., Nabar, M. V., and Nadkarni, D. R.
- Wheeler, W. See Bone, W. A.
- Wheelock, T. H. See Moss, H. V.
- Whelan, M., nitrate content of animal tissues and the fate of ingested nitrate, A., 525.
- Wheland, G. W., quantum-mechanical treatment of molecules by the method of spin valency, A., 685. Number of canonical structures of each degree of excitation for an unsaturated or aromatic hydrocarbon, A., 917.
- See also Pauling, L.
- Whelen, M. S. See Du Pont de Nemours & Co., E. I.
- Whelpley, M. G. B. See under Guggenheim Bros.
- Whessoe Foundry & Engineering Co., Ltd., Grant, A. G., and Taylor, A. E., dehydration of and removal of hydrocarbons from fuel gases, (P.), B., 393.
- Grant, A. G., Taylor, A. E., English Electric Co., and Donnelly, W., electrical precipitation of matter suspended in gases, (P.), B., 682.
- and Lucas, O. D., compositions particularly adapted for heat transmission and distribution, (P.), B., 578.
- Whetzel, J. C. See Cook, W. O.
- Whiddington, R., and Woodroffe, E. G., collisions of electrons with nitrogen molecules, A., 801.
- See also Priestley, H.
- Whipp, B., micro-calorimetry, A., 57.
- See also Roberts, J. K.
- Whipple, G. H. See Daft, F. S., Knutti, R. E., and Pommerenke, W. T.
- Whipple, R. S., difficulties of measuring temperature of molten steel, B., 62.
- Whitaker, A. H., pigments for paper-making: their manufacture and application, B., 447.
- Whitaker, F. A., efficiency of kilns, B., 724.
- Whitaker, H., and Petroleum Processes Corp., purification of sulphur-containing substances, (P.), B., 216.
- Whitaker, R., colour imported to coffee by cream treated in various ways, B., 122.
- Whitaker, W. A., [maintaining moisture content of] tobacco, (P.), B., 125.
- Whitby, L., solution of magnesium in aqueous salt solutions. IV., A., 587.
- Whitcher, A. E. See Haywards Heath District Gas Co.
- White, A. See Standard Oil Development Co.
- White, Abraham, and Gordon, W. G., basic amino-acids yielded by thyroglobulin, A., 1543.
- and Jackson, R. W., effect of bromobenzene on the utilisation of cystine and methionine by the growing rat, A., 1533.
- See also Cohn, E. W.
- White, A. E., and Clark, C. L., comparison of single-step, long-time creep results with Hatfield's time-yield stress, B., 190. Influence of grain size on high-temperature characteristics of ferrous and non-ferrous alloys, B., 501.
- Clark, C. L., and Wilson, R. L., application of pearlitic alloy steels to specific [petroleum] refinery problems, B., 483.
- White, A. G. See Imperial Chem. Industries.
- White, A. H. See Herkus, P. J.
- White, C. E., preparation of iodine, A., 1090.
- See also Parker, M. W.
- White, C. F., and Goodeve, C. F., absorption spectra of bromine triiodide, iodine pentafluoride, and cyanogen fluoride, A., 9.
- White, D., effects of geophysical factors on evolution of oil and coal, A., 724.
- White, F. L. See Brooker, L. G. S.
- White, G. S. J. See Imperial Chem. Industries.
- White, H., [colour] spots on [silk] hosiery, B., 847.
- White, H. A., physics of gold solution, B., 64.
- White, H. E. See Ballard, S. S., and Grace, N. S.
- White, H. J., technique of Kerr cells, A., 320.
- White, H. L. (Cheshunt), sterilisation of lettuce seeds, B., 374, 742. Vernalisation, B., 742.
- White, Harvey L., and Monaghan, B., factors influencing electrophoretic mobilities and apparent critical potentials, A., 1460.
- Monaghan, B., and Urban, F., electrical factors influencing rate of filtration of aqueous electrolyte solutions through cellophane membranes, A., 578. Influence of electrolyte concentration on ratio of electro-osmotic to electrophoretic mobilities, A., 933.
- See also Monaghan, B., and Urban, F.
- White, H. V., effect of impurities on surface tension of type-metal alloys, B., 64. Type metals, B., 152. Surface tension of molten lead alloys under oxidising conditions, B., 459.
- White, J., Graham, R., and Hay, R., oxidising power of basic slags. I. Determination of the binary diagram $CaO-Fe_2O_3$. II. Determination of dissociation pressures of Fe_2O_3 , CaO, Fe_2O_3 , and $2CaO, Fe_2O_3$, A., 704.
- See also Hay, R.
- White, J. C., separator, (P.), B., 1075.
- White, J. D., and Rose, F. W., jun., isolation of a nonanaphthene from an Oklahoma petroleum, B., 293.
- See also Mair, B. J., and Rose, F. W., jun.
- White, J. R., yeast composition, (P.), B., 745. Dry yeast, (P.), B., 745.
- White, J. T. See Hardon, H. J.
- White, L. M., Hardesty, J. O., and Ross, W. H., ammoniation of double superphosphate, B., 628.
- See also Ross, W. H.
- White, P., and Caughley, F. G., effect of perspiration on leather, B., 1058.
- White, P. J., production of a protective coating on aluminium and its alloys, (P.), B., 681.
- White, R. J., and Dauncey, W. R., fire-proofing compositions, (P.), B., 948.
- White, R. P., flowers [root rot and soft rot of calla], B., 517.
- White, R. V. See Bartlett, P. D.
- White, S. H., gaseous fuel mixtures, (P.), B., 662.
- White, T. N., X-ray absorption coefficient of xenon, A., 139.
- White, W. See Gerlough, T. D.
- White, W. C. O. See MacGee, A. E.
- White, W. E. See Elliott, P. H.
- White, W. H., arsenical substitutes for cabbage-worm control, and limitations of arsenical treatments, B., 968.
- White, W. P., reading device for burettes, A., 466. Leads and the formula in electric calorimeter calibration, A., 839.
- White Eagle Oil Corporation. See Nevitt, H. G.
- Whitehead, R., effects of infectious ectromelia, starvation, exposure to heat, and cholesterol feeding on cortical lipin of the adrenals in mice, A., 516.
- Whitehead, R. W. See Fox, C. A.
- Whitehead, S., and Nethercot, W., breakdown of dielectrics under high voltage, with particular reference to thermal instability, A., 1303.
- Whitehead, W. See Dreyfus, C.
- Whitehead, W. E., and Maw, W. A., control of the northern fowl mite, B., 327.
- Whitehorn, J. C., determination of adrenaline in blood, A., 642.
- Whitehouse, A. G. R., dissolved constituents of human sweat, A., 513.

- Whitehouse, J. M., and Haddan, A. J. H., [burner for] combustion of powdered or granulated fuel, (P.), B., 892.
- Whitelaw, G. P., and Snyder, J. C., physiological production of sympathin in the liver, A., 788.
- Whitelaw, N. G., and Mack, J. E., perturbed series, especially in C III, B I, and O IV, A., 799.
- Whiteley, J. H., effect of oxygen and sulphur on iron in scaling, B., 633.
- Whiteley, J. M., jun. See Standard Oil Development Co., and Wiezevich, P. J.
- Whiteley, J. O. See Dietz, C.
- Whiteley, J. T., Heyman, I. W., and Zavon, S. L., steel, (P.), B., 857.
- Whiteside, A. G. O., Edgar, J., and Goulden, C. H., influence of environment on carotenoid content of hard red spring wheat, B., 170.
- Whitefield, B. W., [agricultural] report of [Sudan] Government chemist, 1933, B., 421.
- Whitfield, J. W. See under Whitfield Bros.
- Whitfield, T. D. See under Whitfield Bros.
- Whitfield Brothers, and Chapman, H., filters, (P.), B., 658.
- Whitfield Gas Producer Patents, Ltd., and Alsop, H. L., [rotary circular] firegrates for gas producers, furnaces, etc., (P.), B., 486.
- Whitford, A. E., highly ionised potassium and calcium spectra, A., 2.
- Whitman, W. G., diffusional processes, B., 705.
See also Standard Oil Co.
- Whitmore, W. F., and Lieber, E., identification of solvents by the xanthate reaction; application to alcohols, B., 486.
- Revukas, A. J., and Smith, G. B. L., "nitroguanylhyazones" of some common aldehydes and ketones, A., 769.
- and Schneider, Herman, microscopical identification of the elements of the platinum group and gold, A., 1096.
- Whitnah, C. H., and Anderson, H. L., determination of calcium, magnesium, and phosphorus in evaporated milk, B., 285.
See also Cave, H. W.
- Whitner, T. C., jun. See Standard Oil Development Co.
- Whitney, L. F., temperature scales of niobium, thorium, rhodium, and molybdenum at 0.667 μ , A., 1312.
- Whittaker, C. M., classification of light-fastness of dyes on vegetable fibres, B., 945.
- Whittaker, C. W., and Lundstrom, F. O., alkali nitrate, (P.), B., 991.
- Lundstrom, F. O., and Hill, W. L., determination of calcium dihydrogen phosphate by means of carbamide, A., 463.
- Lundstrom, F. O., and Shimp, J. H., action of urea on calcium orthophosphates, B., 590.
- Whittaker, N. See Whittaker & Co., Ltd., C.
- Whittaker, R. M., development of rotenone and similar substances as insecticides, B., 919.
- and Glickman, I., oxidation of rotenone by copper in an alkaline medium, A., 228.
- Whittaker & Co., Ltd., C., and Whittaker, N., grinding mills, (P.), B., 210.
- Whittemore, E. R., Overman, C. B., and Wingfield, B., [control of] semi-commercial drying of press-board by measuring its electrical resistance, B., 764.
- Whittier, E. O., Cary, C. A., and Ellis, N. R., effect of lactose on growth and longevity, A., 1273.
- Whymper, R., and Bradley, A., vitality of wheat. III. Vitality, and action of heat on wheat seeds, B., 170.
- Whytlaw-Gray, R., coagulation in smokes, A., 444.
- Wiazownicka, H., solubility of phosphorus compounds of wheat flour and ability of phytin to combine with protein substances therein, A., 134.
- Wibaut, J. P., [simplification of] Pictet's synthesis of nicotine], A., 872.
- and Gastel, (Frl.) A. J. P. van, yohimbine. III, A., 367.
See also Cohen, F. H., and Willink, H. D. T., jun.
- Wiberg, E., potential series of acids and bases (acidity potential as a quantitative measure of acidity and basicity), A., 38. Concept of normal acidity potential, A., 450.
- and Heubaum, U., action of substituents on boron halides. IV. Action of hydrogen and alkyl halides on boron halides, A., 459.
- and Schuster, K., preparation of boron hydride. II. Action of phosphoric acid on magnesium and beryllium boride, A., 50.
- and Sütterlin, W., compounds of the type $\text{BCl}_{3-n}(\text{OR})_n$. II. Decomposition [into two compounds of the same series] in the compound $\text{BCl}_{3-n}(\text{OMe})_n$, A., 459. Preparation and mode of formation of boron hydrides. III. Action of anhydrous sodium formate on boron, boron oxide, and boron nitride, A., 459. Vapour pressure and m.p. of dimethyl- and trimethyl-amine, A., 574.
- Wichmann, H. J., and Clifford, P. A., determination of lead, particularly in tinned foods, B., 747.
- Wick, G. C., properties of nuclear constituents, A., 278. Theory of β -rays and magnetic moment of the proton, A., 679. Vibration and rotation spectrum of the molecule HD, A., 1437.
- Wick, H. See Chang, F. T., and Volmer, M.
- Wick, R. M., cyanide solutions, A., 166.
- Wickenden, L. See Wadsworth, D. V.
- Wickert, J. N. See Carbide & Carbon Chemicals Corp.
- Wickwire, G. C. See Burge, W. E.
- Widdecke, preparation of lubricating oil, paraffin, and asphalt from distillation residues from German crude petroleum, B., 392.
- Widdell, H. E., and Gasoline Products Co., conversion of petroleum hydrocarbons, (P.), B., 486.
- Widdows, S. T., Lowenfeld, M. F., Bond, M., Shiskin, C., and Taylor, E. I., antenatal secretion of human mammary gland and comparison between this and that obtained directly after birth, A., 773.
- Widdowson, E., high-speed steel, B., 1047.
- Widdowson, E. M., and McCance, R. A., available carbohydrate of fruits; determination of glucose, fructose, sucrose, and starch, A., 240.
- Widell, T. See Edenhalm, H.
- Widenbauer, F. See Nothaas, R.
- Widmann, A. See Jost, W.
- Widmann, E. See Schneider, E.
- Widmark, E. M. P., effect of dinitrophenol on velocity of metabolism of ethyl alcohol, A., 655.
- Widmer, G. See Frey, K., and Soc. Chem. Ind. in Basle.
- Wiebe, A. H., McGavock, A. M., Fuller, A. C., and Markus, H. C., ability of fresh-water fish to extract oxygen at different p_{H} , A., 238.
- Wiebe, R., and Gaddy, V. L., solubility of helium in water at 0°, 25°, 50°, and 75° and at pressures to 1000 atm., A., 817. Solubility of a mixture of hydrogen and nitrogen in water at 25° in the pressure range 50–1000 atmospheres, A., 1200.
- and Tremearne, T. H., solubility of hydrogen in liquid ammonia at 25°, 50°, 75°, and 100° and at pressures to 1000 atmospheres, A., 25.
- Wiechmann, E., dangers and injuries in insulin application, A., 775.
- Wielawek, B. See Kling, K.
- Wiedemann, A. See Schuler, W.
- Wiedemann, O. See Fischer, F. G.
- Wiederholt, W., corrosion investigations, B., 154.
- Wiedmann, G., and Mialki, W., Röntgenographic investigations on enamel melts, B., 453.
- Wiegand, C. J. W. See Gardner, J. H.
- Wiegand, H., Dietzel, A., and Zschimmer, E., influence of carbon content of typical crystal-glass sands on coloration of glass with selenium, B., 1093.
- Wiegand, W. B., higher alcohols in rubber compounding. I. Preliminary experiments. II. Glycerin, B., 279. Paints, lacquers, etc., (P.), B., 33.
- and Snyder, J. W., rubber pendulum, Joule effect, and dynamic stress-strain curve, B., 240.
- Wiegel, E., acceleration of sedimentation of potato starch by adding acid to starch milk, B., 823.
[with Schuler, H.], sedimentation velocity and sediment volumes of native potato starch with variation of p_{H} , A., 699.
- Wieger, B., Bewoid size system, B., 845.
- Wiegardt, P., lead coating of cables, B., 107.
- Wieland, H. [with Heymann, K., Tsatsas, T., Juchum, D., Varvoglis, G., Labriola, G., Döbelstein, O., and Boyd-Barrett, H. S.], occurrence of free radicals in chemical reactions. VIII. [Thermal fission of aryl- and acyl-azotriphenylmethanes], A., 77.
- and Hesse, G., constitution of poisons of the native toad. VIII, A., 749.
- and Sonderhoff, R., mechanism of oxidation processes. XLII. Decomposition of citric acid by yeast, A., 1539.
- and Wille, F., mechanism of oxidative processes. XLI. Dehydrogenation of alcohol by yeast, A., 532.
- Wieland, P. See Frey, K.
- Wielen, P. van der, reaction of borax-glycerol-water solutions, A., 1205.
- and Witteboon, S., colloidal silver chloride, B., 990.
See also Arkel, C. G. van, and De Jong, J.

- Wieler, A., spherites, A., 162. Comber's test [for soil acidity], B., 36. Leaf injury by acids and tarry matter, B., 118.
- Wiemann, J., synthesis of a methyl- and a dimethyl-hexitol, A., 605. Hydrogenation of a mixture of two α -ethylenic aldehydes, A., 608. Hydrogenation of a mixture of two α -ethylenic aldehydes; synthesis of glycols, OII-CHR-CHR'-OH, A., 963. Synthesis and constitution of a dimethylhexitol, A., 1104.
- Wieneke, H. A., filter, (P.), B., 387.
- Wiener, A. S. See Rosenfeld, S.
- Wiener, B. Z. See Dole, M.
- Wiener, J. A., and Harmon, J. B., composition [wall-board], (P.), B., 806.
- Wieninger, P. M., detection of small quantities of starch present in beer as a result of faulty saccharification, B., 1113.
- Wiersma, E. C. See De Haas, W. J., and Fereday, R. A.
- Wiertelak, J., properties and chemical treatment of flax straw, B., 142. Artificial silk. I. Composition and hygroscopicity of native and regenerated celluloses, B., 142.
- and Czarniecki, J., paraffin-impregnated wood; resistance to water and sulphuric acid solutions, B., 632.
- and Garbaczówna, I., adsorption of organic liquids by cellulose products, B., 488.
- See also Campbell, W. G.
- Wierzuchowski, P. See Kamiński, L.
- Wierzuchowski, M., specific dynamic action and oxidation of hexoses introduced into circulation of amytal-anæsthetised dogs, A., 241. Experimental "superabundance" diabetes in a normal dog, A., 1008. Law of mass action and specific dynamic action of carbohydrates, A., 1016.
- and Chmielewski, T., behaviour of lactic acid in blood and urine during continuous intravenous injection of glucose over the whole scale of assimilation, A., 778.
- Chmielewski, T., Gostynska, A., and Fiszal, H., effect of prolonged muscular work on the metabolism of carbohydrates introduced at constant velocity into the circulation, A., 1016.
- and Fiszal, H., balance of water in organs during injection of carbohydrates and related substances, A., 240. Absorption by intact organs of glucose, maltose, and galactose injected at constant rate into the blood-stream, A., 240. Assimilation by organs of fructose introduced into the blood-stream at constant rate, A., 240. Intravenous assimilation of hexoses in narcosis provoked by amytal, A., 241. Effect of adrenaline on utilisation of fructose introduced at constant velocity into the circulation at the three levels of assimilation, A., 1542.
- Gostynska, A., and Fiszal, H., maximum rate of intravenous assimilation of glucose in the resting dog under application of isovolumetric water regulation, A., 777.
- and Sekuracki, F., first type of formation of lactic acid in tissues in oxidodynamic metabolism of hexoses: glucose and maltose, A., 240. Second type of formation of lactic acid in the organism during combustion of hexoses, accompanied by specific dynamic action: fructose, A., 240.
- Wierzuchowski, M., and Sekuracki, F., hydrolysis, oxidation, and energy exchanges in a dog. I. Formation and removal of lactic acid in the organs during starvation and during oxidation of galactose, glucose, and maltose. II. Lactic acid arising from or deposited in organs during metabolism of fructose, in respect to control experiments with inositol, acetaldehyde, and sodium lactate, A., 522. Interference of hepatic fructolysis and adrenaline glycogenolysis in a normal dog at three states of assimilation, A., 1017.
- Wies, C. H. See Thompson, W. R.
- Wieseneder, H., eclogites from the eastern Alps, A., 322.
- Wiesmann, R., control of the cherry-fly (*Rhagoletis cerasi*, Linné), B., 375.
- Wiessmann, modern treatment of stall manure, B., 866.
- Wiessmann, H., and Neumann, W., gas sorption of soil components and soils. I, B., 1010.
- Wiest, P., mixed crystal formation and lattice constants for silver-copper alloys, A., 692.
- See also Glocker, R., and Pfister, H.
- Wiester, H. J. See Döpfer, H.
- Wiezevich, P. J., Whiteley, J. M., and Turner, L. B., spontaneous ignition of petroleum fractions, B., 889.
- See also Frolich, P. K., and Standard Oil Development Co.
- Wiggam, D. R. See Hercules Powder Co.
- Wiggins, W. R., and Wood, Charles Edmund, oilfield water analysis. IV. Determination of sodium by means of zinc uranyl acetate. V. Determination of potassium, B., 432, 608.
- Wigglesworth, V. B., function of the corpus allatum of insects, A., 1285.
- Wight, C. F., and Smiles, S., rearrangement of *o*-benzamide-sulphides, A., 615.
- Wight, T. W. See Kermack, W. O.
- Wigner, E., interaction of electrons in metals, A., 153.
- and Bardeen, J., work functions of univalent metals, A., 1050.
- Wiig, E. O., photochemical investigations. I. Effect of ammonia pressure on quantum yield for decomposition of ammonia, A., 1331.
- Wijk, D. J. van, influence of fillers on vulcanised rubber, B., 512.
- Wijk, W. D. van. See Van Gessel, K. M.
- Wijk, W. R. van, measurement of corrosion of metals, B., 272. Prevention of explosions in pipes, B., 837.
- See also Ornstein, L. S.
- Wijkman, N. See Sutter, H.
- Wikström, E. G. A., insecticide, (P.), B., 1062. Destruction of insects and vermin, (P.), B., 1062.
- Wilbrandt, W., significance of structure of a membrane for its selective permeability, A., 1071.
- Wilcke, H. L., Henderson, E. W., and Murray, C., influence of protein levels and calcium and phosphorus balance on rachitis of chicks, A., 1403.
- Wilcolator Co., thermostatic regulator, (P.), B., 434.
- Wilcox, D. E. See Russell, W. C.
- Wilcox, E., effect of cathode rays on metal surfaces, A., 1332.
- and Carr, P. H., attempts to produce relief patterns by the direct electrographic effect, A., 1449.
- Wilcox, H. B. See Porter, C. W.
- Wilcox, H. L., comparative value of fresh and aged tetanus toxoid as an immunising agent, A., 1169.
- Wilcox, H. W., and Link, G. K. K., serologically active (haptenic) carbohydrates of genotypes of *Neurospora tetrasperma* and *N. sitophila*, A., 786.
- Wilcox, R. J., alloy[steel] castings to resist heat and corrosion, B., 728.
- Wilcox, R. L. See Anderson, E. A., Fuller, M. L., and Waring, R. K.
- Wilcox, W. D., dissociation of hydrocarbon gases and vapours to obtain a mixture of hydrogen and nitrogen in determined proportions, (P.), B., 215. Mixture of hydrogen and nitrogen in determined proportions from natural gas and similar hydrocarbon gases, (P.), B., 439.
- Wilcox-Rich Corporation. See Charlton, G.
- Wilcoxson, F., and Hartzell, A., organic thiocyanates as insecticides, B., 647.
- and McCallan, S. E. A., fungicidal action of organic thiocyanates, resorcinol derivatives, and other organic compounds, B., 1110.
- See also Hartzell, A., McCallan, S. E. A., and Zimmermann, P. W.
- Wilcoxson, L. S., results from the B. & W.-Tomlinson process for recovery of chemicals and heat from kraft [pulp] black liquor, B., 719.
- Wild, F. E. See Fairley, A.
- Wild, G. L. E. See Walker, O. J.
- Wild, W. See Spence, R.
- Wild-Barfield Electric Furnaces, Ltd. See Coleman, J. P. D., and Sinclair, I. S.
- Wilde, S. A., soil reaction in relation to forestry and its determination by simple tests, B., 371.
- and Scholz, H. F., subdivision of the Upper Peninsula experimental forest on basis of soils and vegetation, A., 61.
- Wilden, M. See Benrath, A.
- Wilder, H. K., and Kellogg Co., decaffeinating coffee beans, (P.), B., 923.
- Wilder, O. H. M., Bethke, R. M., and Record, P. R., effect of method of manufacture on nutrient value of fish meals as determined by nitrogen balance of rats, B., 172.
- See also Bethke, R. M., and Record, P. R.
- Wilder, W. See Krauss, W. E.
- Wildt, R., ozone and oxygen in planetary atmospheres, A., 424.
- Wiley, M. H. See Zerban, F. W.
- Wiley, R. M., and Harder, E. H., apparatus for study of liquid-vapour equilibrium compositions, A., 1341.
- Wiley, W. J., determination of traces of hydrogen sulphide in sewer gases, B., 656. Titratable acidity of milk. I. Influence of various buffers on the titration curves of fresh and sour milk. II. "Buffer curves" of milk, B., 873. Neutralisation of cream for butter making, B., 874.
- Wilgus, H. S., jun., Norris, L. C., and Heuser, G. F., haddock meal; effect of manufacturing process on nutritive values, B., 605.
- See also Norris, L. C.
- Wilharm, G. See Kolbach, P.
- Wilharm, W. C. See Westinghouse Electric & Mannfg. Co.

- Wilhelm, A. F., cold-resistance of winter-hard crop plants with special reference to influence of varied mineral nutrition and of nitrogen metabolism, B., 1061.
- Wilhelm, E. J. See New Jersey Zinc Co., and Truesdale, E. C.
- Wilhelm, H. A. See Ostrem, C. T.
- Wilhelm, J. O., Misener, A. D., and Clark, A. R., viscosity of liquid helium, A., 1313.
- See also Burton, E. F., and Tarr, F. G. A.
- Wilhelm, M. L. See Robbins, S. S.
- Wilhelm, W. F., and Marshall Field & Co., variable-resistant chemicals and bandage embodying same, (P.), B., 79. Coating of chloroamine, (P.), B., 100.
- Wilhelmi, T. See Lottermoser, A.
- Wilhelmi, A., is the [manurial] action of superphosphate more rapid than that of basic slag? B., 372.
- Wilhelmi, C. M., Henrich, L. C., and Hill, F. C., composition of mixed duodenal secretions, A., 379. Intragastic factors in regulation of gastric acidity, A., 773. Influence of duodenal secretions on acid gastric contents, A., 1399.
- Henrich, L. C., Neigus, I., and Hill, F. C., chloride concentration of gastric secretion from fundic pouches and from the intact whole stomach, A., 106, 512. Average composition of human duodenal secretion, A., 513.
- Willigt, L. See Pestemer, M.
- Wilke, E., and Ganser, H., effect of electric waves on heterogeneous catalysis in solutions, A., 455.
- Wilken-Jorden, T. J. See Rossouw, S. D.
- Wilkins, G. See Danckwortt, P. W.
- Wilkins, E. S., jun., Willoughby, C. E., Kraemer, E. O., and Smith, F. L., micro-determination of lead in biological materials; titrimetric-extraction method, A., 531.
- See also Willoughby, C. E.
- Wilkins, F. S., determining water content of green forage, B., 428, 1021.
- Wilkins, R. A., and Industrial Development Corp., electrolytic apparatus [for making copper sheet and strip], (P.), B., 108. Electrolytic method and apparatus [for production of metal foil], (P.), B., 557. Electrolytic apparatus, (P.), B., 813. Electrolytic method [for making copper sheet and strip], (P.), B., 858. [Soldier-] coated electrolytic [copper] product, (P.), B., 909. Electrolytic apparatus [for manufacture of metal sheets], (P.), B., 1002.
- Wilkins, T. R., and Burdick, S. D., photographic determination of the half-period of thorium-B, A., 6.
- Wilkins, W. E., sodium, potassium, calcium, magnesium, and phosphorus contents of skeletal and cardiac muscle, bladder, and uterus, A., 511.
- and Regen, E. M., course of phosphatase activity in healing of fractured bone, A., 1417.
- See also Regen, E. M.
- Wilkinson, H. See Aylward, F. X., Channon, H. J., and Lowery, H.
- Wilkinson, J. A. See Bickford, W. G.
- Wilkinson, J. F. See Jackson, Harold.
- Wilkinson & Son, Ltd., J., and Saurin, C. J., aluminium fluoride, (P.), B., 187, 306.
- Will, H. C., and Will & Baumer Candle Co., Inc., candles, (P.), B., 31.
- Will & Baumer Candle Co., Inc. See Geller, L. W., and Will, H. C.
- Willard, A. C. See Newton, H. M.
- Willard, H. H., and Thompson, J. J., determination of lead as periodate, A., 55.
- and Young, P., determination of ter-valent chromium in chromic acid and in chromium-plating baths, A., 187. Standardisation of potassium dichromate, A., 317.
- Willavoy, H. J. See Garner, W. E.
- Willberg, B., determination of lead in drinking water, B., 432.
- and Cajander, H., solubility of enamel of cooking vessels, B., 850.
- Wille, F. See Wieland, H.
- Wille, J., effect of ammonia and pyridine on mobility of cupric ion, A., 37.
- Wille, K., and Fritsch, E., baked goods for diabetics, (P.), B., 1116.
- Willemart, A., preparation of coloured hydrocarbons of the rubene type, A., 612, 616. Coloured hydrocarbons of the rubene type. I., A., 862.
- Willenborg, W. J., analysis of gases by differential thermal-conductivity measurements, (P.), B., 363.
- Willets, W. R., surface application of titanium pigments [to paper], B., 222. Factors affecting retention [of fillers in paper], B., 1088.
- Willets, P. G., and Hartford-Empire Co., glass-resistant refractory and batch composition for its manufacture, (P.), B., 188.
- Willey, C. H. See Chase, C. T.
- Willey, E. J. B., and Foord, S. G., active chlorine, A., 176.
- Willey, J. L. See Ewing, S. E. T.
- Willey, L. A. See Fink, W. L.
- Willheim, R. See Frisch, C.
- Willi, E. See Erlenmeyer, H.
- Williams, A. See Jones, H. G.
- Williams, A. E., industrial alcohol, B., 823.
- Williams, A. L., and Union Switch & Signal Co., photo-electric cell, (P.), B., 731.
- Williams, A. T., structure of spectra of hafnium and tungsten, A., 137. Persistence of intercombination lines, A., 271. Ultimate lines and excitation potentials, A., 272. Absorption spectra of metallic and organic colloidal solutions and absorption of metal films, A., 1459.
- Williams, C., thermal expansion and ferromagnetic change in volume of nickel, A., 153, 287.
- Williams, C. B. See Skinner, J. J.
- Williams, C. C. See Cameron, E. J.
- Williams, C. E., and Kinnear, H. B., copper stools for ingot moulds. II., B., 1048.
- Sullivan, J. D., and Battelle Memorial Inst., basic refractory, (P.), B., 631. Cellular clay insulation for metallurgical apparatus, (P.), B., 902.
- Williams, C. G., interim report of Research and Standardisation Committee on cylinder wear, B., 438.
- Williams, C. H. B., Follett-Smith, R. R., and Cameron, C., field experiments with sugar-cane. IV., B., 1110.
- Williams, C. R. See Chapman, R. W.
- Williams, E. A. See Utterback, C. L.
- Williams, E. F. See Chibnall, A. C., and Piper, S. H.
- Williams, E. J., electron-positron pairs, A., 274. Scattering of hard γ -rays and annihilation radiation, A., 426.
- Williams, E. R. See Toohey, E. A., and Walker, J. P.
- Williams, F. E. See Kellaway, C. H.
- Williams, F. I., and Amer. Tool & Machine Co., centrifugal apparatus, (P.), B., 1121.
- Williams, F. J. See Honess, A. P.
- Williams, F. M., relation of smoothness and plane porosity to printing qualities of paper, B., 719.
- Williams, F. R. See Dippy, J. F. J.
- Williams, G. J., granite-schist contact in Stewart Island, New Zealand, A., 725.
- Williams, G. K., refining of lead, (P.), B., 156.
- Williams, H. See Evans, R. D.
- Williams, H. A., tin and lead in canned fish, B., 1115.
- Williams, H. H., and Anderson, W. E., liver and theory of fatty acid desaturation, A., 653.
- See also Anderson, W. E.
- Williams, H. M., and Bellingham, W. J., starch and glutinous materials [from dough], (P.), B., 694.
- Williams, I., colloidal changes during rubber vulcanisation, B., 643.
- See also Du Pont de Nemours & Co., E. I.
- Williams, I. R., and Smith, E., blood picture, reproduction, and general condition during daily exposure to illuminating gas, A., 895.
- Williams, J. F., the chemist and economy in production of sugar, B., 1011.
- Williams, J. S. See Kobe, K. A.
- Williams, J. W., chemical applications of recent dielectric constant theory, A., 283, 567.
- and Green, L., effect of dyes on colonies of pathogenic fungi. III., A., 1031.
- See also Cady, L. C., Hurd, C. D., and Hansen, L. A.
- Williams, K. A. See Bolton, E. R., and Technical Research Works, Ltd.
- Williams, M., and Richter, G. H., acidic constituents of a West Texas [petroleum] pressure distillate, B., 1081.
- Williams, N. H. See Dent, F. J.
- Williams, P. C. See Dods, E. C.
- Williams, P. H., leafy gall of the chrysanthemum, B., 374.
- Williams, P. S., and Scott, Gordon H., electrode arrangement for spark spectrography, A., 1340.
- Williams, P. T. See Minerals Separation, Ltd.
- Williams, Robert C., lubrication as affected by physical properties of lubricants, B., 582.
- and Ironsides Co., metal-forming lubricants, (P.), B., 277.
- Russell, H. W., and Ironsides Co., removal of metallic soap from lubricating emulsions, (P.), B., 136.
- Williams, Robley G., and Gibbs, R. C., slight correction to the Rydberg constant for hydrogen (H^1), A., 1437.
- See also Gibbs, R. C.
- Williams, R. D., and Olmsted, W. H., determination of indigestible residue (crude fibre) in faeces: lignin, cellulose, and non-water-soluble hemicelluloses, A., 648.
- Williams, R. F., analysis of effect of phosphorus supply on transpiration ratio in plants, A., 795.

- Williams, R. J., fractional electrical transport as a tool in biochemical research, A., 1436.
- and Christensen, B. E., a "growth substance," A., 1282.
- and Rohrman, E., pantothenic acid as a nutrilit for green plants, A., 1548.
- and Saunders, D. H., effects of inositol, crystalline vitamin-B₁, and "pantothenic acid" on growth of different strains of yeast, A., 124.
- See also McBurney, C. H., and Rohrman, E.
- Williams, R. R., structure of vitamin-B, A., 504.
- Buchman, E. R., and Ruehle, A. E., crystalline vitamin-B₁. VIII. Sulphite cleavage. II. Acidic product, A., 1035.
- and Keresztesy, J. C., crystalline vitamin-B₁. XI. Presence of quaternary nitrogen, A., 1510.
- Waterman, R. E., and Keresztesy, J. C., crystalline vitamin-B₁. VII. Relation to pathological states, A., 1035.
- Waterman, R. E., Keresztesy, J. C., and Buchman, E. R., crystalline vitamin-B₁. III. Cleavage of [the] vitamin with sulphite, A., 668.
- See also Buchman, E. R., Waterman, R. E., and Wintersteiner, O.
- Williams, S. B. C. See Plant, S. G. P.
- Williams, S. E., efficiency of excitation of the nitrogen first positive bands by electron impact, A., 799.
- See also Thompson, N.
- Williams, V., mechanical stability of lime and soda greases, B., 508. Recording waxes, B., 1102.
- Williams, W. D. See Studer, F. J.
- Williams, W. G. See Britton, H. T. S.
- Williams, W. H. See Dow Chem. Co.
- Williams & Co., C. K. See Ayers, J. W.
- Williams, Ltd., H., and Smith, C. M., [boiler] furnaces, (P.), B., 931.
- Williams (Hounslow), Ltd., Green, A. G., Ackroyd, A., and Macmaster, A., azo-dyes and their application in leather dyeing, (P.), P., 895.
- Williamson, A. T., polymerisation and thermal decomposition of keten, A., 67.
- and Hinshelwood, C. N., kinetics of esterification; reaction between acetic acid and methyl alcohol catalysed by hydrions, A., 43.
- See also Hinshelwood, C. N.
- Williamson, W. T. H. See Gracie, D. S.
- Willibgang, E. See Aston, J. G.
- Willimott, S. G., Cyprus salt, A., 602.
- See also Wokes, F.
- Willink, H. D. T., jun., and Wibaut, J. P., preparation of 2:2'-dipyridyl and some of its derivatives, A., 630.
- Willis, J. M., de-aeration of clay, B., 545.
- Willis, W. H. See Walker, R. H.
- Willkie, H. F., maturation of spiritous liquors, (P.), B., 249.
- Willmann, J., milk treatment, (P.), B., 380.
- Willmer, E. N., respiration of tropical fresh-water fishes, A., 371.
- Willmore, C. B. See Aluminum Co. of America.
- Willoughby, C. E., Wilkins, E. S., jun., and Kraemer, E. O., determination of lead; removal of bismuth interference in the dithizone method, A., 1094.
- See also Wilkins, E. S., jun.
- Willoughby, W. J. See Andrews, N. H.
- Wills, A. P., and Boeker, G. F., dependence of diamagnetism of water on temperature, A., 149.
- Wills, I. A., metabolic rate of developing amphibia with reference to sexual differentiation, A., 889.
- Wills, L. A. See Crawford, M. F.
- Wills, W. H., and Findley, J. K., physical properties and corrosion-resistance of 18-8 chromium-nickel steel wire, B., 152.
- Willshaw, H. See Dunlop Rubber Co.
- Willson, V. A., toxic properties of grease-wood; physiological action of oxalic acid and its soluble salts, A., 246. Determination of available chlorine in hypochlorite solutions by direct titration with sodium thiosulphate, B., 225.
- Willstaedt, H., flavin-like pigment from linseed, A., 421. Pigments of *Lactarius deliciosus*, L. I., A., 495. Pigment of red cabbage. II., A., 674. Pigment of the fruit of *Rosa rugosa*, Thunb., A., 1290.
- Willstätter, R., and Rohdewald, M., enzyme-chemical method, A., 400. Endo-enzymes of tissue and glands. V. Amylases of liver and other organs, A., 401.
- Wilm, D., and Hofmann, U., X-ray investigations of finely divided crystals (active charcoal and lamp-black), A., 285.
- See also Endell, K.
- Wilman, H. See Finch, G. I.
- Wilmet, and Mathieu, analysis of alloy covering tinned sheet iron, B., 1146.
- and Réglade, determination of cotton mixed with asbestos, B., 718.
- Wilmot, H. F. See Hammick, D. L.
- Wilson, B. H., porous bodies and their behaviour as building materials, B., 188.
- Bonnell, D. G. R., and Nottage, M. E., properties of liquid films in fine-pored systems, A., 294. Behaviour of water held in fine-pored media, A., 1316.
- and McConnell, F. J., measurement of atmospheric sulphur pollution by means of lead peroxide, B., 207.
- Wilski, O., mathematical treatment of mixing problems, B., 432.
- Wilsmann, W., accuracy of determination of fat [in milk], B., 873.
- Wilsome, F. P. W., unwanted creases in woven and knitted fabrics, B., 846.
- Wilson, A. H., optical properties of solids, A., 1310.
- Wilson, A. L., new aliphatic amines, B., 893.
- See also Carbide & Carbon Chemicals Corp.
- Wilson, Allan M. See Pound, J. R.
- Wilson, Arden M. See Knight, C.
- Wilson, A. T. See Kremer, M., Lunds-gaard, E., and Robertson, J. D.
- Wilson, B. D., and Staker, E. F., ion exchange in peat soils, B., 1107.
- Wilson, C. A. See Kenyon, F.
- Wilson, C. J., and Wenzke, H. H., dielectric constants of acetylenic compounds. VI. Acetylenic acids, A., 1056.
- Wilson, Cecil L. See Russell, A.
- Wilson, Christopher L., preparation of organic compounds containing deuterium; dideuteriomalonie deuteracid and trideuteriacetic deuteracid, A., 731. *cyclo*Hexanone, A., 979. Vapour pressure of hexadeuterobenzene, A., 1198.
- See also Angus, W. R., and Ingold, C. K.
- Wilson, C. T. R., and Wilson, J. G., falling cloud-chamber and a radial-expansion chamber, A., 599.
- Wilson, C. W., and California Fruit Growers' Exchange, drying of [edible] organic materials, (P.), B., 1067.
- Wilson, D. M., new B.S.I. specifications [for asphalt cements], B., 1080.
- Wilson, D. W. See Bott, P. A., De Beer, E. J., and Wolff, W. A.
- Wilson, E. See Egloff, G.
- Wilson, E. B., jun., normal frequencies of vibration of the plane square molecule AB₃ with reference to structure of nickel carbonyl, A., 284. Statistical weights of rotational levels of polyatomic molecules, including methane, ammonia, benzene, *cyclo*propane, and ethylene, A., 810. Calculation of vibrational isotope effect in polyatomic molecules by a perturbation method, A., 1448.
- Wilson, E. E., olive knot disease: its inception, development, and control, B., 1111.
- Wilson, E. O., Peng, S. L., and Li, C. F., tanning action of aluminates, B., 564.
- Wilson, F. E. See Warren, W. H.
- Wilson, F. J. See Macleod, D. B.
- Wilson, Forsyth J. See Thomson, J. K.
- Wilson, F. W. See St. Georges's Engineers, Ltd.
- Wilson, G. F., rhododendron white fly, B., 691.
- Wilson, G. W., coffee-cream and whipping-cream problems, B., 1066. Preservation of composite samples [of milk and cream], B., 1066.
- Wilson, H., Page, G. A., and Cartwright, V. S., dewatering clay suspensions by spray evaporation, B., 453.
- Wilson, H. A., energies of α -, β -, and γ -rays, A., 141. Energies of α - and β -rays, A., 910. Nuclear energies of aluminium and beryllium, A., 1443.
- Wilson, H. B. See Cummins, J. E.
- Wilson, H. V. See Culbertson, J. W.
- Wilson, J. See Pilkington Bros., Ltd., and Triplex Safety Glass Co.
- Wilson, J. A., acids in vegetable-tanning extracts, B., 1007.
- See also Dunlop Rubber Co.
- Wilson, J. B., determination of methyl alcohol in alcoholic products, B., 1017.
- Wilson, J. D., use of formaldehyde on outdoor vegetables, B., 246.
- Wilson, J. E. See Thomassen, L.
- Wilson, J. G. See Wilson, C. T. R.
- Wilson, J. J. See Loomis, W. E.
- Wilson, J. K., neutralising power of forage crops for organic and mineral acids, B., 922.
- Wilson, J. L. See Halvorsen, H. O.
- Wilson, John L. See Heisig, G. B.
- Wilson, J. N., milovite: an unusual form of silica, A., 1101. Bentonite, A., 1346.
- Wilson, J. R. See Standard Telephone & Cables.
- Wilson, J. W., asparagus caterpillar: life history and control, B., 375.
- Wilson, K. M. See Boyd, E. M.
- Wilson, L. T. See Hanford, Z. M.
- Wilson, M. E., rock alteration at the Amulet mine, Noranda district, Quebec, A., 1346.
- Wilson, N. A. B., and Read, J., optically active diphenylhydroxyethylamines and isohydrobenzoin. VI. Di-*o*-methoxyphenylhydroxyethylamines and related substances. VII. The 1:2-*cyclo*hexanediols and related compounds, A., 1234, 1493.

- Wilson, P. J., jun. See Koppers Co. of Delaware.
- Wilson, P. W. See Orcutt, F. S.
- Wilson, R. E. See Standard Oil Co., and Standard Oil Co. of Indiana.
- Wilson, R. L. See White, A. E.
- Wilson, R. W. See Scott, A. F.
- Wilson, S. D., and Sun, L. H., ephedrine. II. New benzyl homologues, A., 209.
- Wilson, T. A., unit cell of uranium calculated from X-ray powder method data, A., 17.
- Wilson, T. L. See Thompson, T. G.
- Wilson, W. B. See Moore, M. M.
- Wilson, W. C. See Trolander, E. W.
- Wilson, W. K., incidence of rickets in rabbits, A., 1403.
- Wilson, W. S., and Merrimac Chem. Co., organic esters, (P.), B., 938. Treatment of acid sludge [from petroleum refining], (P.), B., 1083.
- Wilson, William S., atomic energy states for excited helium, A., 1298.
- and Lindsay, R. B., atomic wave functions for some excited states of helium, A., 804.
- Wilson & Co. See Goranflo, S.
- Wilton, T. O., distillation of tar and cracking of oil, (P.), B., 538. Concentration of gas liquor, (P.), B., 616.
- and Chem. Eng. & Wilton's Patent Furnace Co., Ltd., apparatus for chemical treatment, washing, draining, and drying of granular crystalline, or similar substances, (P.), B., 2. Plant for production and treatment of ammonium sulphate, (P.), B., 305.
- Wimmer, A., sewage of Backnang, a leather-manufacturing town, B., 752.
- Wimmer, E. J. See Hughes, R. H.
- Wimmer, G., and Lüdecke, H., is boron deficiency the cause of heart- and dry-rot in sugar beet? B., 38.
- See also Krüger, W.
- Winand, L., kinetic energy of neutrons emitted by beryllium bombarded by Po α -radiation, A., 276.
- Winans, J. G., effect of heat on intensity of mercury lines and bands, A., 1292.
- and Cram, S. W., molecular spectrum of cadmium vapour, A., 423.
- Winch, L., preservation of [raw] hides and skins with traces of silver, B., 1007.
- Winchell, A. N., pyroxene group, A., 1478.
- See also Pauling, L.
- Winchester, G., and Hill, D. M., oxygen liquefier, A., 1342.
- Winchester Repeating Arms Co., and McNutt, J. D., explosive priming mixture, (P.), B., 879.
- Winckelmann, J., drop analysis in practice, A., 315.
- Winckler, L. W., determination of very small amounts of carbon monoxide in air. II., B., 880.
- Windaus, A., Lettré, H., and Schenek, F., 7-dehydrocholesterol, A., 1363.
- Windecker, C. N., treatment of sewage, etc., (P.), B., 576. Clarification of chlorinated solutions [sewage], (P.), B., 880.
- Tucker, E. W., and Diamond Alkali Co., electrolytic cell, (P.), B., 108.
- See also Lyon, C. E.
- Windisch, H., apiole, A., 208.
- Windsorfer, K. See Bunte, K.
- Windus, W. See Turley, H. G.
- Wingard, R. E. See Ball, T. R.
- Winge, Ö., haplophase and diplophase in *Saccharomycetes*, A., 1418.
- Winge, Ö., and Hjort, A., *Saccharomycetes* and other fungi still alive in the pure cultures of Hansen and Klöcken, A., 785.
- Wingert, W. B., and Semet-Solvay Eng. Corp., recovery of phenols from gas liquors, (P.), B., 440.
- Wingfield, B. See Whittemore, E. R.
- Wingfoot Corporation, preservation of unstable organic substances [anti-oxidants for rubber], (P.), B., 841. Treatment of [bonding of rubber to] artificial silk, (P.), B., 989. Preservation of rubber, (P.), B., 1105.
- See also Endres, H. A., and Sebrell, L. B.
- Winkelmüller, W. See Schiemann, G.
- Winkle, W. van, jun. See Luck, J. M.
- Winkler, C., [three-ply] printing paper, (P.), B., 448. Printing paper, (P.), B., 491.
- Winkler, C. A., effect of temperature on photochemical decomposition of acetone, A., 713.
- and Hinshelwood, C. N., thermal decomposition of acetone vapour, A., 827. Thermal decomposition of acetaldehyde, A., 827. Factors determining the velocity of reactions in solution; formation of quaternary ammonium salts in benzene solution, A., 1208.
- Winkler, K. See Standard-I. G. Co.
- Winkler, J. See Piotrowski, W. von.
- Winkler, L. W., determination of carbon dioxide content of atmospheric air, B., 288. Determination of very small amounts of carbon monoxide in air, B., 526.
- Winkler, O. See Grube, G.
- Winkler, S., and Petersen, S., tryptophan reaction and detection of hetero-auxin, A., 639.
- See also Helferich, B.
- Winnek, P. S., and Schmidt, C. L. A., solubilities, apparent dissociation constants, and thermodynamic data of dihalogenated tyrosine compounds, A., 1076.
- Winning, C., and Gasoline Antioxidant Co., motor fuel, (P.), B., 984.
- Winogradsky, H., nitrifying bacteria in activated Paris mud, A., 899.
- Winogradsky, S., method in soil microbiology as illustrated by studies on *Azotobacter* and the nitrifying organisms, B., 918.
- Winokuti, K., and Iida, T., sulphonated oils. XXII. Form of organically combined sulphuric acid in the sulphonated oils, B., 641.
- Iida, T., and Kurata, M., sulphonated oils. XXIII. Reaction between castor oil and concentrated sulphuric acid, B., 641.
- and Kurata, M., sulphonated oils. XXIV. Reaction between olive oil and concentrated sulphuric acid, B., 641.
- Winslow, C. E. A., influence of cations on bacterial viability, A., 256.
- Winstein, S. See Young, W. G.
- Winston, A. W. See Dow Chem. Co.
- Winston, J. R., colouring borax-treated citrus fruits, B., 378. Reducing decay in Florida citrus fruits by use of borax, B., 378. Factors influencing decay in Florida citrus fruits, B., 378.
- and Tilden, R. W., colouring of mature citrus fruits with ethylene gas, B., 378.
- Winter, C. A. See Emery, F. E.
- Winter, E. W., carbohydrate metabolism. II. Carbohydrate metabolism in various obstetrical and gynaecological conditions, including diabetes with pregnancy, A., 518.
- Winter, H., resins in bituminous coals, A., 1347.
- and Free, G., thickening of wash oil, B., 660.
- Winter, J., second approximation in Born's method, A., 560.
- See also De Broglie, L.
- Winter, O. B., Robinson, H. M., Lamb, F. W., and Miller, E. J., determination of lead, A., 1094.
- Winter, P. K., and Moyer, H. V., asymmetry of the ferrous iron-dichromate titration curve, A., 1205.
- Winter, R. C. See Liverpool Grain Storage & Transit Co.
- Winterfeld, K., and Holschneider, F. W., derivatives of β -2-pyridylpentan- β -ol, A., 988. Condensation of α -carboxylic esters of the pyridine series, A., 988.
- WINTERKORN, H., and Baver, L. D., sorption of liquids by soil colloids. I. Liquid intake and swelling by soil colloidal materials, B., 36.
- Wintermute, H. A., and Research Corp., system for electrical precipitation [of suspended particles from gases], (P.), B., 558.
- Winterstein, A., and Schön, K., fractionation and purification of organic substances by chromatographic adsorption. III. Is there a chlorophyll c? IV. Polycyclic aromatic hydrocarbons, A., 204, 362.
- Schön, K., and Vetter, H., fractionation and purification of organic substances by chromatographic adsorption. V. Anthracene, chrysene, and pyrene, A., 204. Synthesis of carcinogenic 1:2-benzpyrene, A., 968.
- and Vetter, H., fractionation and purification of organic substances by chromatographic adsorption. VI. 1:2-Benzpyrene, A., 204.
- See also Schürch, O.
- Wintersteiner, M. R. See Victor, J.
- Wintersteiner, O., and Abramson, H. A., electrical potential of amorphous and crystalline amphoteric surfaces in liquids, A., 30.
- Williams, R. R., and Ruehle, A. E., crystalline vitamin-B₁. II. Elementary composition and ultra-violet absorption, A., 668.
- Winterton, R. J. See Partington, J. R.
- Winther, C., sensitivity of certain reactions to light, A., 1331.
- Winthrop Chemical Co., Inc., and Hooper, C. W., water-miscible vitamin preparations containing vitamin-D, (P.), B., 1166.
- See also Johnson, T. B., and Neubert, O.
- Winzenburger, W. See Schmidt, J.
- Winzer, K., poisoning by illuminating gas, B., 390. Nitrogen absorption by brown coal on treatment with ammonia [to produce fertilisers], B., 612.
- See also Lieske, R.
- Winzor, F. L., colouring matters of *Drosera Whittakeri*. III. Synthesis of hydroxydroserone, A., 623.
- See also Beck, A. B., and Macbeth, A. K.
- Wirick, A. M. See Bills, C. E.
- Wirjodihardjo, W. See Hardon, H. J.

- Wirshing, R. J., Mougey, H. C., and Gen. Motors Res. Corp., electroplating [with nickel and chromium], (P.), B., 909.
- Wirt, A. E. V., and Imperial Paper & Color Corp., water-repellent coating on paper or similar material, (P.), B., 97.
- See also Imp. Paper & Color Corp.
- Wirth, C. See Egloff, G., and Watson, K. M.
- Wirth, H. E. [with Thompson, T. G., and Utterback, C. L.], distribution of isotopic water in the sea, A., 600.
- See also Robinson, R. J.
- Wirth, J. K., and Säureschutz Ges.m.b.H., [artificial resin-lined] vessels, (P.), B., 321.
- Wirth, W., treatment of poisoning due to inhalation of hydrocyanic acid, A., 1534.
- Wirtz, F. M., and Reimbold & Strick G.m.b.H., enamelling or glazing of metal [e.g., copper or aluminium foils], (P.), B., 1095.
- Wirtz, K., exchange of heavy hydrogen atoms between hydrogen and ammonia, A., 1460.
- Wirz, H. See Ruzicka, L.
- Wise, E. M., and Eash, J. T., properties of platinum metals. I. Strength and annealing characteristics of platinum, palladium, and their commercial alloys, B., 500.
- See also Kihlgren, T. E.
- Wise, L. E. See Peterson, F. C.
- Wiseman, J. D. H., ultrabasic epidiorite from St. Catherine's, Loch Fyne, A., 725.
- Wisfeld, W. See Rheinboldt, H.
- Wishart, F. O. See Craigie, J.
- Wishnofsky, M., absorption of glucose from the human gastro-intestinal tract, A., 522.
- Kane, A. P., Shlevin, E. L., and Byron, C. S., influence of dinitrophenol on carbohydrate metabolism, A., 1275.
- Wissel, K. See Standard-I. G. Co.
- Wissink, G. M., and Woodrow, J. W., detection of vitamin-A by means of the magneto-optic apparatus, A., 1428.
- Wissler, W. A. See Haynes Stellite Co.
- Witanowski, W. R., chemical composition of the round-leaved sundew (*Drosera rotundifolia*, L.), A., 420. Chemical composition of sundew. II., A., 1375.
- Witham, G. S., jun. See Adams, Frederick Wildes.
- Witherington, P. See Chattaway, F. D.
- Withey, A. W., preparation of vegetable fibres for spinning, (P.), B., 265.
- Withey, N. H. See Timms, A. G.
- Withrow, L., and Rassweiler, G. M., formaldehyde formation by preflame reactions in an engine; spectroscopic study, B., 581. Effect of lead tetraethyl on preflame reactions in an engine, B., 588.
- Withrow, R. B. See Sperti, G.
- Witmer, E. E., specific heat, entropy, and free energy of gaseous nitric oxide computed from spectroscopic data, A., 21.
- Witschi, E., and Keck, W. N., differential effect of gonadotropic substances on development of cyclic sex characteristics in the English sparrow, A., 1032.
- and Levine, W. T., oestrus in hypophysectomised rats parabiotically connected with castrates, A., 413.
- Witte, A. A. M., luminescence phenomena with benzhydrazide and benzenesulphonhydrazides, A., 808.
- Witte, E., colour measurement with the leukometer, B., 785.
- Witte, R. M., measurement of the colour of solids for practical purposes, B., 1121.
- Witteboon, S., effect of boric acid on properties of apomorphine hydrochloride solutions, A., 637.
- See also Wielen, P. van der.
- Wittekindt, W., trass and free calcium hydroxide, B., 592.
- See also Biehl, K.
- Wittenberg, H., sintering and sinter-roasting of ores, B., 727.
- Wittenberg, L. See Barrett Co.
- Wittermans, A. W., micro-determination of urea in blood, A., 1393.
- Wittig, G., and Obermann, B., ring closure and radical formation. VI. 1:1:2:2-Tetraphenylcyclopropane, A., 203.
- and Petri, H., overcoming two cases of steric hindrance, A., 858.
- and Stichnoth, O., configuration of 4:5-disubstituted phenanthrene and phenazone derivatives, A., 869.
- Wittka, F., unusual case of damage to filter-cloths [used in fat-refining], B., 30. Ghee and vegetable ghee, B., 652.
- Wittke, H., magnetic after-effect, A., 1196.
- See also Gans, R.
- Wittstadt, W. See Thiessen, P. A.
- Witty, G., and Kalt, O. J., artificial lumber, (P.), B., 633.
- Witz, H. E., apparatus for [electrical] treatment of air for healing purposes, (P.), B., 682.
- Witzmann, E. J., oxidation of metabolites. III. Mechanism of oxidation of fatty acids in an alkaline phosphate-hydrogen peroxide system, A., 114.
- Wix, A., and Bunker, S. W., treatment of tobacco, (P.), B., 525.
- Wix, M., and Bunker, S. W., [apparatus for] treatment of tobacco [with rays], (P.), B., 175. Treatment of tobacco, (P.), B., 254.
- Wizenfeld, L. See Szper, J.
- Wizinger, R. See Dilthey, W.
- Wlodek, J., Ralski, E., and Wodzicka, M., soils bearing lime plants in granitic areas, B., 115.
- Wodlinger, M. H., and Cal-Aspirin Co., combination of salicylic acid and calcium salts, (P.), B., 749.
- Wodon, J. L., and Ledrut, J., variations of p_H and alkaline reserve in intoxication by water [alone or associated with posterior pituitary extract] and by guanidine, A., 652.
- Wodzicka, M. See Wlodek, J.
- Wöhlbier, W. See Honcamp, F.
- Wöhler, L., and Roth, J. F., brisance of explosives, B., 335.
- Wördehoff, P. See Strack, E.
- Wogau, N. A., effects of weed control and of the preceding crop on the quality of grain, B., 73.
- Wohl, K., osmotic theory, A., 1201.
- Wohlmut, H. L. See Wahl, M.
- Wojahn, H., aminoalkylamino-derivatives of carbocyclic compounds, A., 482.
- Wojciechowski, J. See Krause, A.
- Wojciechowski, M., thermochemical researches on diazo-derivatives of *p*-chloroaniline and other amines, A., 169. Ebulliometric determination of the amount of a substance adsorbed on the surface of solid substances, A., 876.
- See also Smith, E. R., and Swientoslawski, W.
- Wojcik, B., and Adkins, H., alkylation of acetoacetic, malonic, and succinic esters, A., 64. Catalytic hydrogenation of amides to amines, A., 70.
- See also Adkins, H.
- Wojnicz-Sianozecki, Z., periodic system of the elements, A., 558.
- Wojtylakowa, M. See Mikulowski-Pomorski, J.
- Wokes, F., acetonitrile test for thyroid, A., 780.
- and Willmott, S. G., cardiac activity and toxicity towards rats of red and white squill from Cyprus, A., 117.
- Wolbach, S. B. See Menkin, V.
- Wolbergs, H. See Kutscher, W.
- Wolczynski, T. See Carr, A. R.
- Wold, P. I., redward shift of spectral lines of nebulae, A., 424.
- Wolf, A., and Goetz, A., magnetostriiction in bismuth single crystals, A., 19. Magnetostriiction of pure and alloyed Bi single crystals, A., 153.
- Wolf, Alan. See Herrmann, Ltd., R.
- Wolf, A. C., organisation of soil investigations in Württemberg, B., 197.
- Wolf, E., 6:7-diethoxy-1-(3':4'-diethoxybenzyl)isoquinoline [pharmaceutical], (P.), B., 382.
- Wolf, F., effective cross-section of helium with respect to He^+ , A., 1048. Charging and ionising cross-section of helium with respect to He^+ , A., 1294.
- Wolf, G., binary system strontium nitrate-strontium hydroxide, A., 703.
- Wolf, H. J., and Heinsen, H. A., tyramine and blood perfusion through the kidney, A., 1153.
- See also Heinsen, H. A.
- Wolf, H. W., and Hougen, O. A., silk degumming. II. Rate of degumming, B., 986.
- Wolf, K. L., and Herold, W., molecular polarisation and association, A., 24.
- Pahlke, H., and Wehage, K., heat of mixing, heat of vaporisation, and association, A., 439.
- and Trieschmann, H. G., heats of sublimation of organic molecules, A., 436.
- Wolf, L., Düsing, W., and Martos, A., detection of very small amounts of phosphorus and phosphine, A., 1472.
- and Kächele, R., chemical behaviour of clays in arable soils, B., 115.
- Schlatter, H., and Jung, W., rapid determination of sand content of soils, B., 115.
- Wolf, O., aluminium and zinc lithographic plates for planographic and off-set printing, (P.), B., 236.
- Wolf, P. M., mesothorium, A., 275.
- Wolf, R. See Maurer, W.
- Wolf, R. B., Hatch, R. S., Hill, R. P., and Internat. Bleaching Corp., bleaching of paper pulp, (P.), B., 266.
- Wolf, W. See Grube, G.
- Wolf-Heidegger, G., influence of adrenaline and insulin on carbohydrate metabolism of snails (*Helix pomatia*, L.), A., 1172.
- Wolfe, H. J., livering of printing inks, B., 417.
- Wolfe, J. M., anterior pituitaries of infantile female rats receiving pregnancy urine extracts, A., 412. Morphological comparison of anterior pituitaries of normal castrated female rats and those receiving injections of pregnancy urine extracts, A., 412.

- Wolfe, J. M., morphological and quantitative reaction of anterior pituitaries of castrated female rats to oestrin injections, A., 1425. Reaction of anterior pituitaries of mature female rats to injections of large amounts of oestrin, A., 1425.
- and Phelps, D., reactions of anterior pituitaries of male rats to administration of anterior pituitary-like substances and to oestrin, A., 1425.
- See also Campbell, M.
- Wolfe, R. A. See Duffendack, O. S.
- Wolfenden, J. H. See Bell, R. P., Edwards, A. J., and Hinshelwood, C. N.
- Wolters, D. See Bigwood, E. J.
- Wolters, F., accuracy of the Curie-Chéneveau magnetic balance, A., 599.
- Wolfe, O., and Hromatka, O., new tropan derivative from coca leaves, A., 98.
- Wolff, C. G. See Du Pont de Nemours & Co., E. I.
- Wolff, E., and Ginglinger, A., experimental production of hermaphrodites by injecting folliculin into chicken embryos, A., 1174. Doses of folliculin necessary to produce intersexuals and the limiting stage of intervention, A., 1544.
- Wolff, G. F., apple wine. I. and II., B., 425, 520.
- Wolff, H. (Ludwigshafen). See Grimm, H. G.
- Wolff, Hans, viscosity relations of oil paints as indicator of the properties of the paint films, B., 319. Relation between oil absorption [of pigments] and particle size and shape, B., 561.
- and Zeidler, G., oil absorption of pigments, B., 465. Drying of carbon blacks. II. Effect of barium sulphate on drying time, gloss, and oil absorption, B., 561. Relationship between oil content, particle size, and particle shape, B., 597. Rapid determination of the critical oil requirement [of pigments], B., 774. "Frosting" of tung oil varnishes, B., 1055.
- Wolff, Heinz, directional variation of the translation mechanism of rock-salt crystals at high temperatures, A., 288.
- Wolff, H. G. See Cattell, M., and Milhorat, A. T.
- Wolff, H. W., mol wts. of stand oils, B., 1101.
- Wolff, L., excessive water-intake and excretion of chloride by dogs, A., 1399.
- Wolff, L. K. See Eekelen, M. van.
- Wolff, R. See Rathery, F.
- Wolff, W. A., and Wilson, D. W., carnosino and anserine in mammalian skeletal muscle, A., 882.
- Wolff & Co. See Transparent Paper, Ltd.
- Wolffersdorff, R. von. See Flasehenträger, B.
- Wolkie, M., effective cross-section of the neutrino, A., 911. Detection of neutrinos, A., 911.
- Wolfrom, M. L., Quinn, J. L., and Christman, C. C., tritylation of sugar mercaptals, A., 199, 734.
- See also Baldwin, W. C. G.
- Wolfson, J., and Nat. Oil Products Co., defoaming [of glue or paper-coating compositions], (P.), B., 636. Defoamed product [adhesive], (P.), B., 686.
- Wolkenstein, M., and Syrkin, J., Raman spectrum of dioxan, A., 1301.
- Wolkin, J. E. See Bodine, J. H.
- Wollan, E. O. See Compton, A. H.
- Wollenberg, H. L., and Longview Fibre Co., chemical treatment for pulp manufacture, (P.), B., 987.
- Wollschitt, H., Bothe, W., Ruska, H., and Schenck, E. G., determination of metabolism by the interferometer, A., 519.
- and Kramer, G., determination of gaseous metabolism, A., 878.
- See also Wetzel, R.
- Wolochow, D., moulded compositions from asbestos, (P.), B., 321, 903.
- Wolters, W., control of *Anomala orientalis* at the Oahu Sugar Company, B., 690.
- Woltersdorf, G. See Zintl, E.
- Woltjer, H. R. See Clay, J.
- Womack, M., and Rose, W. C., feeding experiments with mixtures of highly purified amino-acids. VI. Relation of phenylalanine and tyrosine to growth, A., 113.
- Womack, N. A., and Cole, W. H., effect of caffeine on basal metabolism, A., 528.
- Womersley, J. R., two nomograms for calculating fluidity of cellulose solutions, B., 587.
- Wonderful Development Co., Inc. See McKenna, H. H.
- Wong, Y. T. See Chi, Y. F.
- Woo, S. C., and Chu, T. C., absorption spectrum of diacetylene in the near ultra-violet, A., 1299.
- and Liu, T. K., absorption spectra and dissociation energies of cyanic acid and some carbinides, A., 1299.
- Wood, A. M., cracking of petroleum vapours, (P.), B., 663.
- Wood, A. R., analysis of glass by treatment of thin films in the autoclave. I. Determination of soda, B., 496.
- Wood, C. B., and Carbon Products Co., Inc., method of forming a fuel briquette, (P.), B., 935.
- Wood, C. E. See Barrett, Edward P.
- Wood, Charles Edmund. See Herbert, R. W., and Wiggins, W. R.
- Wood, D. A. See Tainter, M. L.
- Wood, D. W., fire risks [in the rubber industry] and their prevention, B., 1058.
- Wood, E. C., and Simpson, T. W., routine determination of fat in faeces, A., 235.
- Wood, F. S., safety paper, (P.), B., 352.
- Wood, F. W., and Thornton, H. R., microbiology of butter. I. Yeast and mould count of butter as a measure of creamery sanitation. II. Growth of moulds in and on butter, B., 604.
- Wood, G. B., waterproof lime, B., 1096.
- Wood, H. G., and Werkman, C. H., intermediate products of propionic acid fermentation, B., 424. Utilisation of agricultural by-products in production of propionic acid by fermentation, B., 570.
- Wood, J. W., and Parrish, E., corrosion from products of combustion of gas. II. Rept. 34 of Joint Research Committee of Inst. Gas Eng. and Univ. Leeds, B., 6.
- Wood, L. J. See Thomas, E. B.
- Wood, N. D., general and domestic stoneware, B., 630.
- Wood, R. C., potash starvation and the cotton plant, B., 516.
- Wood, R. G., and Ayliffe, S. H., measuring the optical constants of small crystals, A., 952. Method for determining the orientation of a crystal under a microscope, A., 1340.
- Wood, R. G., Ayliffe, S. H., and Cullinane, N. M., crystallographic and X-ray investigation of diphenylamine derivatives, A., 434.
- Wood, R. O. See Eastman Kodak Co., and Nat. Aniline & Chem. Co., Inc.
- Wood, R. T., and Magnesium Development Corp., [magnesium] alloy, (P.), B., 107. Die lubricant [for use in extrusion of magnesium alloys], (P.), B., 274.
- See also Aluminium, Ltd.
- Wood, R. W., Raman spectrum of hexadeutero benzene, A., 1189.
- and Rank, D. H., Raman spectrum of heavy chloroform, A., 1053.
- and Straub, H. W., influence of nitrogen and carbon dioxide on the absorption spectrum of mercury vapour, A., 138.
- See also Price, W. C.
- Wood, S. E. See Harris, T. L., and Hildebrand, J. H.
- Wood, W. A., hardness and lattice distortion of cold-rolled α -brass, B., 272. Differences in the structure of electro-deposited metallic coatings shown by X-ray diffraction, B., 997.
- Wood, W. B., *jun.*, physicochemical study of the reducing action of glucose, A., 1083.
- Wood, W. L. See Sinnatt, F. S.
- Wood Chemical Products Co. See Harris, R. B.
- Woodall-Duckham (1920), Ltd., and Clark, A. N., tunnel kilns, (P.), B., 2.
- and Reber, J. W., rotary furnaces for combustion of town refuse, etc., (P.), B., 336.
- and Richards, F. B., heating of carbonising chambers, (P.), B., 213.
- See also Greenfield, G. J.
- Woodard, H. Q., and Chesley, L. C., swelling of gelatin in deuterium oxide, A., 164.
- Woodard, W. A., and Cowland, A. N., tannin in maté, B., 476.
- Woodbridge, D. B., diamagnetism of alkyl acetates, A., 1453.
- Woodbury, C. A. See Du Pont de Nemours & Co., E. I.
- Woodcock, W. J., and John Bull Rubber Co., Ltd., breaking down of crude rubber, (P.), B., 369.
- Wooddell, C. E., method of comparing the hardness of electric-furnace products and natural abrasives, B., 1094.
- Woodhall, W. See Weber, J. E.
- Woodhead, D. W. See Payman, W.
- Woodhead, H. See Brit. Jeffrey-Diamond, Ltd.
- Woodhead, S. A., fur dermatitis, A., 236.
- Woodhouse, D. L., action of ascorbic acid on tumour metabolism, A., 236. Non-carcinogenicity of synthetic lubricating oils and action of commercial spindle oils, solvent-fractionated spindle oil distillates, and tar oils, tested under similar conditions, B., 179.
- Woodhouse, G. L. See Newell & Co., Ltd., E.
- Woodhouse, J. C. See Du Pont de Nemours & Co., E. I.
- Woodland, A. W., spessartite in the Cambrian manganese ore of Merionethshire, A., 1220.
- Woodley, J. D. See Haag, H. B.
- Woodman, H. E., artificial drying of young grass, B., 285.
- and Eden, A., nutritive value of lucerne. III. Composition, digestibility, and nutritive value of lucerne hay, lucerne meal (English and American), and lucerne leaf meal (American), B., 285.

- Woodman, H. E., and Evans, R. E., nutritive value of lucerne. IV. Leaf-stem ratio, B., 1162.
- and Oosthuizen, P. M., nutritive value of pasture. XI. Composition and nutritive value of pasturage, B., 44.
- Woodman, R. M., emulsions. III. Lipin-containing substances as emulsifiers, A., 445.
- See also Engledow, F. L.
- Woodroffe, E. G. See Whiddington, R.
- Woodrow, J. W., and Schmidt, A. R., fluorescence of substances containing vitamin-A, A., 12.
- See also Philipson, J. B., and Wissink, G. M.
- Woodruff, L. E., water vapour content of natural gas, B., 660.
- Woodruff, W. M. See Bennet-Clark, T. A.
- Woods, D. D., indole formation by *Bacterium coli*. I. Breakdown of tryptophan by washed suspensions of *B. coli*. II. Action of washed suspensions of *B. coli* on indole derivatives, A., 663.
- Woods, E. B. See Oberst, F. W.
- Woods, H. See Lacey, W. N.
- Woods, H. J., fibre forms in animal hairs, A., 1266.
- Woods, S. E., combination curves, hydrogen-ion regulating powers, and equivalents of lactalbumin and its non-identity with serum-albumin, A., 234.
- Woodward, C. B., Keefe, R. B., Colt, E. W., and Armour & Co., process of distributing solids, (P.), B., 1121.
- Woodward, G. E., glyoxalase. III. Glyoxalase as a reagent for micro-determination of glutathione, A., 784. Glutathione and ascorbic acid in tissues of normal and tumour-bearing albino rats, A., 1401.
- Munro, M. P., and Schroeder, E. F., glyoxalase. IV. Antiglyoxalase action of kidney and pancreas preparations, A., 784.
- Woodward, G. J., fungicidal power of phenol derivatives. I. Effect of introducing alkyl groups and halogens, A., 409.
- Woodward, H. See Poncher, H. G.
- Woodward, H. E. See Du Pont de Nemours & Co., E. I.
- Woodward, J. See Hess, J. H.
- Woodward, J. C. See McKay, C. M., and Madsen, L. L.
- Woodward, L. A., Raman effect and complexity of mercurous and thalious ions, A., 11.
- and Horner, R. G., self-registering micro-photometer, A., 188.
- Woodward, R. B. See Hall, W. T.
- Woodward, R. H. See Street, J. C.
- Woodward, T. E. See Hotis, R. P.
- Woodward, W. A., and Pickles, J., stability of mixtures of hydrogen peroxide and ethyl alcohol, B., 205.
- Woodward, W. H., extractor, (P.), B., 1076.
- Woody, G. V. See Keatley, C. W.
- Woog, P., Sigwalt, R., and De Saint-Mars, J., rapid determination of hydrogen sulphide in gaseous mixtures, A., 948.
- Wool Industries Research Association, King, A. T., and Galley, R. A. E., treatment of wool and similar fibres, or materials made therefrom, to render them unshrinkable, (P.), B., 19.
- Woodlridge, D. See Roller, D.
- Woodlridge, G. H. See Minnett, F. C.
- Wooley, B. L. See Gilman, H.
- Woolf, J. A. See Leaver, E. S.
- Woolgar, (Mrs.) M. D. See Haworth, W. N.
- Woolley, D. W., and Sandin, R. B., synthetic fats. I. Preparation of trionadecylin, A., 960.
- Wooster, C. B., structure of metal ketyls. II. Dissociation of alkali metal pinacولات to metal ketyls in liquid ammonia solution, A., 84.
- and Dean, J. G., structure of metal ketyls. IV. Nature of intermediate product in reaction with alkyl halides, A., 345.
- and Holland, W. E., structure of metal ketyls. III. Mechanism of reactions with alkyl halides, A., 84.
- Wooten, L. A. See Clarke, B. L.
- Wooten, L. E., and Ruehle, A. E., potentiometric titration in non-aqueous solutions. II. Source of error in acidimetry, A., 52.
- Worden, E. C., and Hanson & Orth, transparent sheets from *Musa* fibre, (P.), B., 400. Utilising purified *Musa* fibre cellulose, (P.), B., 400, 624. Acetylation of cellulose, (P.), B., 1089.
- Work, H. K., and Aluminum Colors, Inc., [oxide] coating of aluminium, (P.), B., 1000.
- See also Aluminum Co. of America.
- Work, L. T., and Twiner, S. B., [preparation and properties of titanium pigments]; effects of precipitation, calcination, and subsequent treatment, B., 510.
- Twiner, S. B., and Gloster, A. J., preparation and properties of titanium pigments; properties of titanium sulphate solution, B., 509.
- Work, R. A. See Lewis, M. R.
- Working, E. B., and Amer. Lecithin Corp., [deep-frying fat, (P.), B., 1003.
- Working, H. See Sahyun, M.
- Workman, A. R. See Doherty Research Co.
- World Bestos Corporation. See Nanfeldt, W.
- Wormald, A. See Imperial Chem. Industries.
- Wormald, H., bacterial diseases of stone-fruit trees in Britain. V. Field observations and experiments on plum bacterial canker, B., 1013.
- Wormall, A., metabolic alterations due to additions of materials, with special reference to vitamins and synthetic foodstuffs, B., 922.
- See also Gaunt, W. E., and Hopkins, S. J.
- Wormwell, F. See Bengough, G. D.
- Wornum, W. E., and Mander Bros., Ltd., photogravure inks, (P.), B., 367.
- Worrall, D. E., chloropropyl yohimboate and its derivatives, A., 875.
- Worschitz, F., crystal structure of the myofibrils; metahistology of animal fibres, A., 1003.
- and Herman, J. von, crystal structure data and calculus (urate) formation, A., 1007. Calcification process of the aorta studied radiographically, A., 1008. Action of hypertonic solutions on crystal structure of animal fibres, A., 1021.
- Worsley, R. R. Le G., insecticidal properties of East African plants, I, B., 167.
- Worssam & Son, Ltd., G. J., Fox, R. H. S., and Weinreb, F., vacuum filters, (P.), B., 787.
- Worthing, A. G., effect of high electrostatic fields on vaporisation of metals, A., 21.
- See also Norris, L.
- Worthley, H. N. See Frear, D. E. H.
- Wossidlo, K. See Meythaler, F.
- Wotherspoon, R. See Badertscher, A. E.
- Wotton, R. M., and Zwemer, R. I., "Glychrogel" mounting solution, A., 378.
- Wouda, J., colorimeter, A., 1097.
- Wouters, J., Raman spectrum of trichlorobromomethane, A., 11.
- Woyonoff, K., composition of the fishes *Bothus macoticus*, Pall, and *Gobius melanostomus*, Pall, A., 1005.
- Wraith, C. R., copper smelting, (P.), B., 556.
- Wray, R. I. See Edwards, J. D.
- Wrede, H., and Paterson Parchment Paper Co., waterproof textiles, papers, cardboards, and pasteboards, and finished containers made from those, (P.), B., 990.
- Wren, H., and Miller, G. L., phenylsuccinic acid series. XI. Interaction of optically active and inactive diphenylsuccinic anhydrides with butyl alcohol and aniline, A., 489.
- Wrenshall, C. L., and McKibbin, R. R., comparison of methods used in extracting soil phosphates, with a proposed new method, B., 1059.
- See also Larmour, R. K.
- Wrigge, F. W. See Geilmann, W.
- Wright, A., [liquid] waste disposal, (P.), B., 928.
- Wright, C. I., and Barbour, F. A., respiratory effects of morphine, codeine, and related substances. III. Effect of morphine, dihydromorphine, dihydromorphinone (dilaudid), and dihydrococaine (dicodid) on respiratory activity of the rabbit. IV. Effect of α -monoacetylmorphine, monoacetyldihydromorphine, diacetylmorphine (heroin), and diacetyldihydromorphine on the rabbit, A., 528, 1018.
- Wright, G. F., mercuration of ethylenes and reaction of methoxy-mercurials, A., 1515.
- See also Roper, E. E.
- Wright, H. L. See Coste, J. H.
- Wright, H. R. See Coffey, D. H.
- Wright, H. T., treatment of carbonaceous material for recovery of volatile constituents and smokeless fuel, (P.), B., 87.
- Wright, H. V. See Oglesby, N. E.
- Wright, J. R. See Standard Oil Development Co.
- Wright, J. T. See Earl of Dudley's Round Oak Works.
- Wright, L., Hirst, H., and Riley, J., structure of electrolytic chromium, A., 1450.
- and Riley, J., deposition of zinc-cadmium alloys from alkaline cyanide solutions, B., 857.
- Wright, L. E. See Shutt, F. T.
- Wright, L. K., adsorption agent [of silica gel], (P.), B., 899.
- Wright, M. D. See Baker, A. Z.
- Wright, N., and Lee, W. C., Raman effect in solutions of some amino-acids, A., 1190.
- Wright, O. E. See Daniels, A. L.
- Wright, S., purification and revivification of [lubricating] oils, (P.), B., 760.
- See also Kremer, M.
- Wrighton, H., outfit for photomicrography, A., 1217.
- Wrightsmann, P. G. See Du Pont de Nemours & Co., E. I.

- Wrinch, D. M., chromosome behaviour in terms of protein pattern, A., 231. Contractile factors of the chromosome micelle, A., 882. Chromosome micelle and the banded structure of chromosomes in the salivary gland, A., 1144.
- Wronberg, A. See Herszfeld, H.
- Wrzesniska, (Mlle.) A., variability of fluorescence spectrum of a glycerol solution of trypanflavine, A., 915.
- Wu, H., clotting of plasma in absence of lipin, A., 375.
See also Wang, Y.
- Wu, N. See Tuan, H. C.
- Wu, T. Y., periodic unequal potential minima and torsion oscillation of molecules, A., 1448.
and Goudsmit, S., low states of the heaviest elements, A., 8.
and Uhlenbeck, G. E., disintegration of Li^6 by protons and deuterons, A., 1441.
- Wucherer, J., benzol production and gas purification by refrigeration, B., 391.
- Wülfert, K., determination of nicotine in smoke of Norwegian and foreign tobaccos, B., 253.
- Wüllen-Scholten, W. van, physical and chemical properties of pigments, B., 366.
- Würges, O. See Voss, J.
- Würth, K., so-called soap formation in paints, B., 814.
- Wuert, A. J. See Du Pont de Nemours & Co., E. I.
- Würzner, K., adhesion, capillary force, and hardening [of cement], B., 592.
- Wüterich. See Rinneberg, K. A.
- Wulf, O. R., and Liddel, U., quantitative studies of the infra-red absorption of organic compounds containing NH and OH groups, A., 1189.
See also Hilbert, G. E.
- Wulff, E., silks weighted with tanning materials, B., 626.
- Wulff, F., bactericidal substances of human serum, particularly in fever, A., 1030.
- Wulff, J., hyperfine structure and nuclear moment of gold, A., 137.
See also Clewell, D. H.
- Wulff, L. M. R., Emge, L. A., and Bravo, F., some effects of 2,4-dinitrophenol on pregnancy in the white rat, A., 1412.
- Wulff, P., reaction of silver ions with gelatin, A., 702. Physical methods in the chemical laboratory. XXIII. Physical methods of analysis, A., 723.
and Anderson, T. F., refraction and dispersion of crystals. XI. Rotating prism method of determining dispersion photographically, A., 684.
and Ehrenberg, W., reaction of silver ions with gelatin, A., 702.
and Kordatzki, W., [antimony electrode for p_{H} measurement], A., 1476.
Kordatzki, W., and Ehrenberg, W., antimony[air] electrode for p_{H} measurements; mechanism of potential formation and the practical application of the electrode, A., 1218.
See also Ehrenberg, W.
- Wulff, R. G., and Wulff Process Co., production of acetylene by compression of natural gas, (P.), B., 343.
- Wulff Process Co. See Wulff, R. G.
- Wulfkuehler, W. See Ball, T. R.
- Wunder, W., influencing of the secondary sex characteristics of the carp (*Rhodeus amarus*) by hormones and other means, A., 1545.
- Wunderling, H. See Auwers, K. von.
- Wunsch, A. See Paneth, F. A.
- Wunsch, H. W. See Hüchel, W.
- Wunschendorff, H., and Valier, (Mme.) P., [separation of nickel and cobalt by means of alkali phosphates], A., 187.
- Wurbs, P., anti-rust or rust-removing paint or coating material, (P.), B., 815.
- Wurl. See Kaufmann, H. P.
- Wurm, K., photochemical processes in comets, A., 676.
- Wurmser, L. See Hazard, R.
- Wurmser, R., and Filitti, (Mlle.) S., reversibility of oxidations in presence of alcohol-dehydrogenase, A., 658.
- Wursten, J. L., and Powers, W. L., reclamation of virgin black alkali soils, B., 163.
- Wurtz, circulation of liquor in sulphite [-pulp] digesters, B., 719.
- Wurzbacher, A. F. See Connolly, G. C.
- Wuyts, H., functional exchange between Grignard compounds and α -bromocamphor, A., 349.
and Docquier, P., preparation of mixed formal by direct acetalisation, A., 1104.
and Lacourt, (Mlle.) A., thiohydrazines, A., 1119. Constitution of thiohydrazides, A., 1360. Synthesis of sulphur derivatives of indole, A., 1379.
and Wachsmuth, H., thiohydrazides as reagents for aldehydes, A., 1512.
- Wyandt, H., and Dunu, F. L., specific dynamic action of protein, fat, and carbohydrate during pregnancy, A., 888.
- Wyart, J., crystal structure of *p*-toluidine, A., 921.
- Wyatt, E. M., Slidell, K., and Amer. Face Brick Res. Corp., building units, (P.), B., 102.
- Wyatt, G. H. See Drew, H. D. K.
- Wyckoff, R. W. G., and Corey, R. B., spectrometric measurements on hexamethylenetetramine and carbamide, A., 286. X-Ray diffraction from haemoglobin and other crystalline proteins, A., 687.
Corey, R. B., and Biscoe, J., X-ray reflexions of long spacing from tendon, A., 1266.
See also Corey, R. B.
- Wyczałkowska, W., influence of temperature on catalysis; hydrolysis of ethyl acetate at 25–60°, A., 309.
- Wyeno, J. See Frohring, W. O.
- Wyeth & Bros., Inc., J., [intestinal] adsorbents, (P.), B., 287*.
- Wygarts, M., and Eeckhout, J., measurement of velocity of rapid reactions, A., 1466.
- Wyk, A. van der. See Meyer, K. H.
- Wylam, B., and Ronald, D., destruction of objectionable materials in gaseous emanations from certain industrial processes, (P.), B., 704.
- Wyler, J. A., and Trojan Powder Co., explosive, (P.), B., 1119.
- Wyler, M. See Imperial Chem. Industries.
- Wyer, O. See Meier, C. A.
- Wyman, J., jun. See Edsall, J. T., and Greenstein, J. P.
- Wyman, L. C., and Suden, C. T., effect of histamine on blood-sugar in adrenalectomised rats, A., 116.
- Wynd, F. L., effects of increasing iodine content of tomato plant on respiration and enzymic activity, A., 419.
- Wynne, A. M. See Farmer, L.
- Wynne-Jones, W. F. K., mixtures of deuterium and protium oxides as ideal solutions, A., 694. Conductivity of methoxides and ethoxides, A., 705.
and Eyring, H., absolute rate of reactions in condensed phases, A., 1205.
- Wynne-Williams, A. I., electrodeposition of metals [copper foil or strip], (P.), B., 315.
- Wyodak Chemical Co. See Denning, P. S.
- Wyss, A. P. See Poe, C. F.
- Wyss, O. F., inflammable metals of a semi-pyrophoric nature, (P.), B., 1098. Inflammable mixture ignitable by rubbing on prepared friction surfaces, (P.), B., 1119, 1167.
- Wyss-Chodat, F., biological food value of milk, A., 647. Is bacteriophage a living organism? A., 665. Reductase and coreductase of milk, A., 1524. Action of respiratory and cellular fermentation inhibitors on transmissible bacterial lysis, A., 1542. Peroxidase and transmissible bacterial lysis, A., 1542. Size of phage particles; preparation of a purified lytic principle, A., 1542.
- Wyszewianska, M. See Wenger, P.
- Wyszynski, F. See Krause, A.

X.

- Xavier, (Miss) M. F., unusual peppermint oil, B., 973.
- Xhignesse, L., working of [beet sugar] massecuites with rapid-cooling Werkspoor crystallisers, B., 870.
- Xylos Rubber Co. See Gross, R. R.

Y.

- Yabroff, D. L. See Branch, G. E. K.
- Yabuta, T., and Sumiki, Y., constitution of ochracein (a fermentation product of *Aspergillus ochraceus*). I. and II., A., 619.
- "Yacco" S.A.F., treatment and examination of lubricants, (P.), B., 136.
- Yager, C. B. See Coleman, G. H.
- Yagi, S. See Uchida, S.
- Yagoda, H., micro-filtration apparatus, A., 1477.
- Yaitschnikov, I. S., binding of bromine by casein, A., 506.
and Spiridonova, A. S., hydrolysis of diketopiperazine and of glycylglycine by hydrochloric acid, A., 587.
- Yajnik, N. A., Goyle, D. N., Verma, J. D., and Rampal, C. L., properties of gels, A., 1320.
See also Speers, P. C.
- Yakimetz, E. M., nature of losses in linseed oil, B., 509.
- Yakimov, P. A., Kuznezova-Zarudnaya, T. N., and Rjabinin, A. A., needles of forest trees as a source of the anti-scorbutic vitamin, A., 546.
and Tatarskaja, R., preparation of tanning substances under high pressure, B., 419.
- Yakushiji, E., occurrence of cytochrome in higher plants and algae, A., 1040.
- Yamada, K., and Noguchi, T., flavinduline and its derivatives, B., 586.
- Yamada, S. See Yamanaka, T.

- Yamada, T., dehydration of castor oil using Japanese acid earth as catalyst, B., 559. Esterification by reaction of soaps and chlorinated hydrocarbons, B., 593.
- Yamafuji, K., enzymes of *Bombyx mori*, L. VII. and VIII. Catalase of the eggs. IX. Blood-protease and -amylase, A., 121.
- and Yonezawa, Y., enzymes of *Bombyx mori*, L. X. and XI. Gastric lipase, A., 1025.
- Yonezawa, Y., and Hiraiwa, I., influence of carbon dioxide and ammonia on cocoon formation of *Bombyx mori*, L., A., 1022.
- See also Hiraiwa, I., and Yonezawa, Y.
- Yamagata, S. See Yamamoto, A.
- Yamagishi, T. See Otake, S.
- Yamaguchi, B., relative precipitating effect of alcohols on organosols, A., 1074.
- Yamaguchi, K., and Nakamura, K., electrical conductivity of ternary solid solutions, A., 576.
- Yamaguchi, M., nickel-iron alkaline storage battery, B., 811.
- Yamaguchi, Saburo. See Komatsu, S.
- Yamaguchi, Seizaburo, physiology of the respiration of bacteria. II. Intracellular indophenol reaction of bacteria, A., 1029.
- Yamaguchi, Y., and Mizuno, S., surface potential differences of unimolecular films of fatty acids, A., 1458.
- Yamakova, L. V. See Schtscherbakov, I. G.
- Yamamoto, A., and Yamagata, S., thermochemical investigations of the energy balance during the growth of fungi, A., 1027.
- Yamamoto, E., velocity of decomposition of diazo-compounds in water. XVI. and XVII., A., 173, 1082.
- Yamamoto, I., nutritive value of ishinagi (*Stereolepis ishinagi*) and ox-liver, A., 1272.
- See also Kawakami, K.
- Yamamoto, K. See Kaneko, Hideo, and Kobayashi, K.
- Yamamoto, Ryo, and Kato, A., odour of black tea. I. Odour of leaves produced in Formosa during fermentation, B., 428.
- and Kato, Yosiaki, essential oil of black tea. I. Fermented Formosan tea leaf. II. Formosan black tea, A., 1289.
- Yamamoto, Ryuzo. See Terada, Torahiko.
- Yamamoto, T., growth of crystals. V. (Supplement). VI. Variations of form of crystals grown in presence of cations which favour their growth. VII. Influence of cations in the solution on the crystal growth of potassium salts, A., 293, 919.
- Yamamoto, Y., passivity of iron and steel in nitric acid solution. III.—VII., A., 172, 827, 1463.
- Yamanaka, T., coloration of aniline, B., 664.
- Yamada, S., Kubota, B., and Yoshikawa, K., production of aromatic amines by hydrogenation. III. Aromatic amines except aniline, and hydrogenation of quinones, B., 664.
- See also Yoshikawa, K.
- Yamanchi, S., influence of yohimbine on the action of morphine and of chloral hydrate on blood-sugar, A., 893.
- Yamanobe, T. See Iitaka, I.
- Yamasaki, Fujito, extractives of giant salamander muscle, A., 1521. Creatinine: creatininic ratio in hibernating and spawning frogs, A., 1530.
- See also Kawada, T.
- Yamasaki, Fumio. See Nakaya, U.
- Yamasaki, Kazumi, isomerism of apocholic and dihydroxycholenic acids, A., 749.
- and Kyogoku, K., fate of dehydrocholic acid and dehydrodeoxycholic acid in the toad, A., 749. Transformation of dehydrocholic acid into β -3-hydroxy-7:12-diketocholic acid in the organism of the toad, A., 1237.
- Yamasaki, Kazuo. See Shibata, Y.
- Yamasaki, R., and Noro, H., quality of waste cylinder oil, B., 935, 1125.
- Yamasaki, S., and Titani, T., vapour-phase hydrolysis, A., 172.
- Yamashita, I. See Yoshimura, K.
- Yamashita, M., condensation of resorcinol with α -chloroisobutyl cyanide and isobutyldehyde cyanohydrin, A., 1371. Condensation of glutar- and adip-dinitriles with resorcinol and phloroglucinol, A., 1372. Synthesis of 6-hydroxy-7-methoxycoumarin-5-acrylactone, A., 1376. Constituents of the stems of *Leucothoe grayana*, Max., A., 1432.
- Yamashita, S. See Horio, M.
- Yamato, T., chlorinated rubber, B., 241.
- Yamauti, K. See Nisikado, Y.
- Yan, T. T. See Cadbury, W. W.
- Yanagigawa, T., seaweeds. I. Red seaweeds for sizing, B., 986.
- Yanagita, M. See Asahina, Y.
- Yancey, H. F., and Taylor, J. A., froth flotation of coal; sulphur and ash reduction, B., 436.
- Yang, C. S. See Chu, C. Y.
- Yang, E. F., solubility of nitrogen in corpuscles, A., 229. Solubility of oxygen in red blood-corpuscles, A., 229.
- Yang, P. S., adsorption of crystalline pepsin by denatured ovalbumin and silk-fibroin, A., 1025. Chinese silk, B., 986.
- Yanick, N. S. See Hill, A. E.
- Yannet, H. See Darrow, D. C.
- Yanovsky, E. See Paine, H. S.
- Yant, W. P., Schrenk, H. H., and Mautz, P. H., removal and determination of small amounts of benzene in biological material, A., 1552.
- See also Jones, G. W., Littlefield, J. B., and Sayers, R. R.
- Yantschulewitsch, J. See Hüchel, W.
- Yao, S. Y. See Tao, W. S.
- Yao, T., sedative action of antipyretics, A., 1156.
- Yardley, W. H., apparatus for washing, purifying, or otherwise conditioning air or other gases, (P.), B., 1122.
- Yarilov, A. A., soil physics, B., 163.
- Yarwood, C. E., effect of mildew and rust infection on dry weight and respiration of excised clover leaflets, A., 269.
- Yashiro, K. See Nagaoka, Z.
- Yasue, M. See Asahina, Y.
- Yasui, Takaji, and Motoki, H., light porous solid bodies, (P.), B., 229.
- Yasui, Toyokichi, electrolytic oxidation of aniline oil, B., 1037.
- Yasuzaki, N. See Shikata, M.
- Yates, C. E. See Anaconda Copper Mining Co.
- Yates, H. See Creamery Package Manuf. Co.
- Yates, J. A., and Brown Co., paper manufacture, (P.), B., 897.
- Yates, S. B. See Husa, W. J.
- Yatsevitch, G. M., crystallography of hercynite from Topsham, Maine, A., 954.
- Yavorsky, M. A., and Reif, E. C., pharmacology of *Galinsoga*, A., 655.
- Yazawa, T., hibernation. I. Reduced glutathione contents of the various tissues of *Rana nigromaculata* throughout all seasons. II. Metabolism in muscle of *R. nigromaculata*, A., 519. *Cetecea*. XLV. Nitrogenous compound from the muscle of the finback whale, A., 646.
- Ydrac, F. L., the p_H of the mineral springs of Bagnères-de-Bigorre, A., 1219.
- Yeakel, E. H. See Richtmyer, N. K.
- Yearian, H. J., intensity of diffraction of electrons by ZnO, A., 1452.
- See also Lark-Horovitz, K.
- Yee, J. Y., and Davis, R. O. E., determination of ammoniacal and urea-nitrogen, A., 1092.
- Yeh, W., radioactivity induced by neutrons, A., 142. Experimental proof of layers of neutrons in the nucleus, A., 142.
- Yemm, E. W., respiration of barley plants. I. Determination of carbohydrates in leaves. II. Carbohydrate concentration and carbon dioxide production in starving leaves, A., 904.
- Yen, J. Y. See Kao, Chung Hsi.
- Yen, Y. Y. C., moisture content of Hanyang smokeless powder, B., 703.
- Yendo, Y., hydro-cracking of animal and vegetable oils, fats, and waxes, B., 158.
- Yenko, F. M., Baens, L., and West, A. P., composition of Philippine woods. VII., B., 189.
- See also Baens, L.
- Yerger, W. S., Somers, L. S., and Imperial Type Metal Co., cast type-metal alloy], (P.), B., 505.
- Yesair, J. See Cameron, E. J.
- Yi, C. L. See Tsai, C.
- Yntema, L. F. See Fleetwood, C. W.
- Yoder, J. D., and Drescher, A. C., Winkler test for determining oxygen in boiler feed-water, B., 209.
- Yoder, L., depression of intestinal reduction by vitamin-D, A., 1431.
- Yoder, P. See Komarewsky, W.
- Yoe, J. H., lead isotopes by magneto-optic method, A., 149.
- and Crumpler, T. B., roulette comparator for colorimetric analysis, A., 320. Photo-electric colorimeter, A., 1097.
- Yogelaar, J. P. M., and Erlichman, E., growth of human fibroblasts in media containing copper, A., 392.
- Yohe, G. R., filtration of hot solutions, A., 840.
- Yokoyama, H. See Takahashi, T.
- Yokoyama, K. See Asahina, T.
- Yokoyama, M., and Kotake, M., catalytic hydrogenation of unsaturated organic compounds by means of selenium, A., 829.
- Yokoyama, S. See Ueno, Sei-ichi.
- Yokoyama, Y., lecithins of egg-yolk, A., 228.
- Yomogita, K., effects of rare earths on polarisation capacity of frog's skin and their significance in relation to colloidal chemistry and permeability, A., 1534.
- Yonezawa, Y., and Yamafuji, K., changes in the body constituents during metamorphosis of *Bombyx mori*, L., A., 1013.
- See also Hiraiwa, I., and Yamafuji, K.
- Yonzon, E. C. See Adriano, F. T.

- York, A. F., and Sternau & Co., Inc., S., nitrocellulose compositions, (P.), B., 914.
- York, D. E., substituting butano for oil gas at Needles, B., 438.
- York Ice Machinery Corporation. See Chamberlain, J. R.
- Yorke, W., and Murgatroyd, F., biological problems in chemotherapy, A., 409.
See also Murgatroyd, F.
- Yorkshire Tar Distillers, Ltd., Billborough, S., and Belford, J. S., treatment of hydrocarbon material to remove carbon disulphide therefrom, (P.), B., 89.
- and Maxted, E. B., hydrogenation of cresols and other phenolic compounds, (P.), B., 1132.
- Yorston, F. H., rate of sulphite pulping, B., 1088.
- Yoshida, I. See Nagai, S.
- Yoshida, S. See Kondo, H.
- Yoshida, T. See Oguri, S.
- Yoshida, U., and Koyanagi, K., melting of metal crystals at their boundaries and a theory of recrystallisation of metals, A., 919.
- and Matsumoto, N., crystal structure of lead chromate produced in the intermicellar space of cellulose, A., 686. Dimensions of micelles of cellulose fibres, B., 719.
- and Park, C., X-ray diffraction pattern of native cellulose, A., 922.
- and Tanaka, H., method of taking stereoscopic radio-micrographs, A., 952.
- Yoshii, Y., and Jimbo, T., microchemical detection of aluminium and its presence in the plant world, A., 1044.
- Yoshikawa, K., catalysis in preparative organic chemistry, A., 191. Catalytic activities of nickel-copper catalysts, A., 711.
- Yamanaka, T., and Kubota, B., production of aromatic amines by hydrogenation. I. Catalysts and conditions of hydrogenation. II. Aniline, A., 854; B., 664.
- See also Yamanaka, T.
- Yoshinatsu, S. I., and Hasegawa, M., determination of magnesium in urine without preliminary removal of calcium, A., 380.
- Yoshimoto, K. See Tanaka, Shosaburo.
- Yoshimura, H., determination of blood- p_{H} by the glass electrode. I. Acid change in shed blood, A., 1143.
- Yoshimura, J. See Iimori, S.
- Yoshimura, K., occurrence of organic bases, especially of cadaverine in potato tubers, A., 269.
- and Yamashita, J., constituents of kanzantiku (*Arundinaria hindsii*, Makino), A., 1434.
- See also Tadokoro, T.
- Yoshimura, R., Kosobe, S., and Ito, S., X-ray study of the system ferric oxide-aluminium oxide, A., 440.
- Yoshimura, S., anohaline stratification of chemical constituents of Lake Osorezan-ko, Aomori Prefecture, Japan, A., 190. Abnormal temperature stratification in lakes Maru-numa and Ooziri-numa, Gunma Prefecture, Japan, and the chemistry of their waters, A., 322.
- Yoshitomi, M., growth and calcification of bones, A., 393.
- Yoshiura, T. See Nagai, S.
- Yosii, T., [cement-kiln] slurry rings. I. and II., B., 881, 1044.
- Yost, D. M., and Beerbower, A., reaction of fluorine with nitric acid and with solid potassium nitrate to form NO_3F , A., 715.
- Ridenour, L. N., and Shinohara, K., chemical identification of the radio elements produced from carbon and boron by deuteron bombardment, A., 559.
- and Sherborne, J. E., heat and free energy of formation of arsenic trifluoride, A., 704.
- See also Anderson, T. F., Barton, R. C., Launer, H. F., and Nies, N. P.
- Yost, F. L. See Breit, G.
- Yothers, W. W., and Miller, R. H., sprays for scale insects and white flies (*Dialeurodes citri*, Ashm.) on citrus trees in Florida, B., 423.
- See also Miller, R. H.
- Youden, W. J., statistical aspect of the production of primary lesions by plant viruses, A., 1043.
- and Welch Manufg. Co., W. M., electrode apparatus, (P.), B., 1101.
- Youker, M. P., and Phillips Petroleum Co., rectifying process [for hydrocarbon oils], (P.), B., 11. Recovery of hydrocarbon liquids from volatile hydrocarbon gases and vapours, (P.), B., 11. Cracking [of hydrocarbons], (P.), B., 217. Conversion of hydrocarbon gases, (P.), B., 794.
- Youmans, J. B., Wells, H. S., Donley, D., Miller, D. G., and Frank, H., effect of posture (standing) on serum-protein concentration and colloid osmotic pressure of blood from the foot in relation to formation of oedema, A., 385.
- Young, C. A., Vogt, R. R., and Nieuwland, J. A., oxygen additive compounds of acetylenes, A., 325.
- Young, C. B. F., significance of anode and cathode efficiencies, B., 857.
- See also Fink, C. G.
- Young, C. H., and Phillips, R. L., [sewage] sludge digestion at Meadville, Penn., B., 431.
- Young, C. O. See Carbide & Carbon Chem. Corp.
- Young, D. J., and Young-Whitwell Gas Process Co., operation of a water-gas set, (P.), B., 792.
- Young, D. W. See McHargue, J. S., and Stewart, O. J.
- Young, E. A. See Alvey, A. B.
- Young, F. W., filters, (P.), B., 930.
- Young, G. H., preparation of nitrogen-substituted sulphon-*o*-toluidides, A., 206. Preparation of *N*-substituted sulphon-*m*- and -*p*-toluidides, A., 742.
- Young, H. A. See Latimer, W. M.
- Young, H. C., and Beckenbach, J. R., insoluble copper compounds as substitutes for Bordeaux mixture, B., 567.
- Young, H. D. See Davis, A. C.
- Young, H. H. See Norris, J. F.
- Young, H. R. See Marshall, John.
- Young, H. Y. See Bilger, L. N.
- Young, J. C. See Faick, C. A.
- Young, J. H. See Du Pont de Nemours & Co., E. I.
- Young, J. W., standardisation of hydrochloric acid with calcite, A., 315.
- Young, J. Z., osmotic pressure of fixing solutions, A., 883.
- Yong, K. P., action of ferric chloride on bamboo, B., 986.
- Young, L. A., and Bradbury, N. E., electron capture cross-sections, A., 5.
- Young, P., See Willard, H. H.
- Young, P. A., penetration, distribution, and effect of petroleum oils in apple, B., 168. Freezing phenomena in creosap emulsions of petroleum oils [insecticides], B., 199. Oil-mass theory of petroleum oil penetration into protoplasm, B., 472. Decane ring-spot of apple leaves and symptoms of decane injury in apple, potato, and onion, B., 919.
- Young, P. C. See Robinson, R.
- Young, P. L. See Standard-I. G. Co.
- Young, R. C., amines of thorium bromide, A., 934. Reactions of zirconium tetrabromide and thorium tetrabromide with potassium and with potassium amide in liquid ammonia, A., 1089.
- Young, R. S., certain rarer elements in soils and fertilisers and their rôle in plant growth, B., 1109.
- Young, R. V. See Gilman, H.
- Young, W. See Imperial Chem. Industries.
- Young, W. G., and Winstein, S., isolation of crotonyl [bromide] and methylvinylcarbinyl bromide [γ -bromo-2^o-butene], A., 1480.
- Young, Y. C. H., coal blending, with special reference to low-temperature tar production, B., 884.
- Young Accumulator Co. See Clark, S. J.
- Young-Whitwell Gas Process Co. See Young, D. J.
- Younger, A. J. See Houstoun, R. A.
- Younger, K. R. See Rhodes, F. H.
- Youngstown Research Association, Inc. See Freed, C. J.
- Youngstown Sheet & Tube Co. See Leahy, F. E., and Reinhardt, G. A.
- Youtz, J. P. See DuMond, J. W. M.
- Youtz, M. A. See Reese, S. W.
- Ypsilanti (Gross-Prinz). See Kohlrausch, K. W. F.
- Yu, T. F., pathological and physiological effects of *Erwinia tracheiphila*, E. F. Smith, on species of *Cucurbitaceae*, A., 1181. *Pythium* damping-off of cucumber, B., 822.
- Chen, H. K., and Hwang, L., seed treatment for controlling kernel smut of millet, B., 568.
- Yuan, C. H. See Li, Y. H.
- Yuan, H. C., and Hsü, T. T., stereoisomerism due to restricted rotation of single linking. I. Optical isomerism of 4:6:4'-6'-tetrabromodiphenic acid, A., 1237.
- Yuasa, T., wave-length shifts of the spectral lines of Sn due to change of pressure, A., 1438.
- Yudina, V. See Kuzminich, I. N.
- Yudkin, J., reduction potentials of bacterial suspensions, A., 788.
- Yü, A. C. See Kühl, Hugo.
- Yü, H. A. See Tsai, L. S.
- Yuen, Q. H. See Hance, F. E.
- Yuill, J. L. See Bennett, G. M.
- Yukina, L. N. See Zharebov, L. P.
- Yumoto, K., spark ignition of low inflammable gas mixtures. III. Influence of presence of nitrogen on the spark ignition of hydrogen-oxygen mixtures, A., 1327.
- Yuu, I. S., and Hong, W. L., effect of various endocrine preparations on growth of beans, A., 418.
- Yung, F. See Chéou, F. K.
- Yusawa, K., surface-active substances in urine, A., 1524.
- Yusope, M. See Corbett, G. H.

Yuster, S., and Reyerson, L. H., chlorination of propane. I. Homogeneous reaction, A., 1082.
See also Rea, C. E.

Yuuki, H., influence of ovariectomy and bile acid on alimentary glycosuria, A., 526.

Yuzuriha, T., iodine metabolism. III., A., 243.

Z.

Zaayer, M., selectivity of hydrogenation, B., 732.

Zabavin, V. I., separation of mixtures of phenols and phenol-containing fractions of tars, B., 56. Conversion of higher into lower phenol homologues, B., 442.

Zabel, R. M., high-speed oil diffusion pump, A., 467.

Zabel, W. P. See Brit. Thomson-Houston Co.

Zabello, P. I., cleaning of glass vessels, A., 466.

Zablinsky, K. See Spengler, O.

Zabolotzki, T. V. See Fiukelstein, V. S.

Zacharewicz, E., simultaneous treatment of browning and chlorosis of vines, B., 471. Nitrogen fertilisers in viticulture, B., 471.

Zacharewicz, W., synthese in the myrtenol series, A., 1375.
See also Dupont, G., and Slawiński, K.

Zachariassen, W. H., crystal lattice of oxalic acid dihydrate and structure of the oxalate radical, A., 152. Atomic arrangement in potassium trithionate crystals $K_2S_3O_6$ and structure of the trithionate radical, $S_3O_6^{2-}$, A., 285. Crystal lattice of samarium sulphate octahydrate, A., 571. Vitreous state, A., 572. Liquid "structure" of methyl alcohol, A., 572. Scattering of X-rays from fluids containing polyatomic molecules, A., 572.
See also Mooney, R. C. L.

Zacharov, S. A., fertility of deep horizons of the soils of the U.S.S.R., B., 1107.

Zacharova, F., and Andreev, F., determination of elasticity of soft vulcanisates, B., 1006.

Zacharova, G. S., microbiological processes of the light-chestnut soils at the Valuisckaja Agricultural Experiment Station, B., 687.

Zacharova, M. I., kinetics of decomposition of solid solutions of silicon in aluminium, A., 1328.
and Tschikin, V. K., kinetics of the breakdown of the solid solution Al-Mg, A., 1199.

Zacharova, T. I., and Palei, F., purification of benzonaphthol, A., 970.

Zacherl, M. K. See Lieb, H.

Zack, S. I., settling and filtering activated-sludge aerated [sewage] liquors, B., 927.

Zackheim, E. A., chemical pack, (P.), B., 706.

Zäch, C., test of Wein's gravimetric method for determination of maltose, A., 1485.

Zaer, A. R. See Ribaud, G.

Zaeslin, H. See Ruggli, P.

Zaganiaris, J. N., technical value of sulphur oils, B., 597.

Zagreb, L. E., preventing [formation of] and removing boiler scale, (P.), B., 386.

Zagvozdkin, K. I., thermal distillation of phosphorus from phosphates, B., 1091.

Zagvozdkin, K. I., and Postnikov, N. N., condensation of phosphorus from gases containing it, B., 493.
See also Kablukov, I. A.

Zaharia, A., Angelescu, E., and Motoc, D., purification of alcohols and brandies. II. Absorption of impurities by various charcoals. III. Elimination of methyl alcohol, B., 745.

Zahlbruckner, A., Asahina, Y., and Fuzikawa, F., lichen substances. XLVIII. Microphyllic acid, a new depside from *Cetraria callata* f. *microphyllina*, A., 490.

Zahn, E., filters, (P.), B., 1026.

Zahn, K., 1:4-dihydroxy-9-anthrone and 1-hydroxy-4:9-anthraquinone, A., 217.

Zahnley, J. W., and Pickett, W. F., field bindweed and methods of control, B., 690.

Zaicoff, R., relations between mean values in electron mechanics, A., 557. General form of wave equation, A., 560.

Zaides, A. L., potentiometric and conductometric titration of ferric salts, A., 319. and Sveshnikova, V. N., physico-chemical properties of solutions of basic ferric sulphate, A., 206.

Zaikov, S. See Agaletzki, F.

Zaitzev, A. A., and Spivak, G. F., energy exchange between neon, argon, and mercury atoms and a solid wall, A., 912.

Zaitzev, B. D., chemical properties of forest litter and peat, B., 1107.

Zajdenman, A. See Dmochowski, A.

Zajic, E. See Späth, E.

Zajic, F., thyrotropic hormone and basal metabolism, A., 541. Basal metabolism and the thyrotropic hormone of the anterior pituitary, A., 1423.

Zajkin, A. A. See Iljinski, M. A.

Zajtzeva, A. A., soil drought and photosynthesis and respiration of plants, B., 820.

Žák, J. See Žáková, J.

Zakhiev, I. S., determination of sulphates in brine, B., 671.

Zaki-ud-Din, M. See Asundi, R. K., and Samuel, R.

Zakomorny, M. See Chrzaszcz, T.

Zakoshchikov. See under Sakostschikov.

Žáková, J., and Žák, J., rapid determination of ash from electrical conductivity of aqueous flour extracts, B., 698.

Zaleski, J., comparison between hydrosulphite and active carbon [as decoloriser for sugar solutions], B., 1014.
See also Smoleński, K.

Zaleski, J. Z. See Wasilewski, L.

Zaleski, M. D., and Tschirkova, H. T., microscopic structure of coals of the Kousnetzki basin, A., 843.

Zalesky, M., seasonal changes in the thyroid gland of the thirteen-lined ground-squirrel (*Citellus tridecemlineatus*) with particular reference to its sexual cycle, A., 1032.

Zallesski, A. M., thermal breakdown of bakelite insulators, B., 1148.

Zalmonzon, R. S. See Zherebov, L. P.

Zalogin, N. G., and Nechaeva, N. N., oxidation of sulphur dioxide in a high-frequency discharge, A., 712.
See also Balandin, A. A.

Zaman, M. See Samuel, R.

Zamaron, J., non-sugar in [beet] juices purified by two different methods, B., 920.

Zamfir, D. See Balanescu, I.

Zamfirescu, G. See Rădulescu, D.

Zamotorin, M. I. See Saldau, P.

Zamoyska, B., storage of cod-liver oil, B., 640.

Zanden, J. M. van der, sulphoglutaconic acid, A., 608. $\beta\beta$ -Disulphoglutaric acid, A., 962.

Zander, E., determination of origin of honey, B., 378.

Zanfagna, R. See Mazza, F. P.

Zaniboni, R., preparation of pure anhydrous liquid ammonia in gasworks and coke-oven plants, B., 225.

Zanke, W. See Reinartz, F.

Zankl, V. W., determination of the "activity" of carbon, using permanganate, B., 1079. Decolorisation [of sugar juice] with active carbon in oxidising and in reducing media, B., 1159.

Zanko, A. M., and Davidov, A. L., use of potassium dichromate in the determination of the iron content (total iron content and ferrous oxide) in iron ores and silicates, B., 853.
and Schljakman, M. J., potentiometric determination of chromium, vanadium, and molybdenum present together, B., 63.
See also Bursuk, A. J.

Zankova, E. See Balarev, D.

Zanotti, F., action of hydrocyanic acid on oxidase of gum arabic, A., 1162. Action of hydrogen cyanide on the oxidase of *Althaea rosea*, A., 1535.

Zapf, G. See Sieverts, A.

Zäpfle, See Klapp, E.

Zappert, R. See Feigl, F.

Zappi, E. I., and Degiorgi, H., active hydrogen in chloroform and the coordination formulae proposed by Urbain and Tchakirian, A., 1222.
and Labriola, R. A., attempts to apply the Tschitschenko reaction to unsaturated aldehydes, A., 846.
and Restelli, E., preparation and solubilities of aluminium alkoxides, A., 325.

Zárday, I., and Weiner, P., antagonism between thyroxine and narcotics with regard to their structure, A., 1019.

Zarembo, K. S., treating coal in a gas producer under pressure, B., 437. Gas-producer conversion of Donetz gas coal and anthracite, B., 437.

Zarewa, T. See Lukirsky, P.

Zart, A., artificial silk, B., 16. Fine rayon and staple fibre, B., 844.

Zarubin, N. M., metallographic examination of hard alloys, B., 63.
and Raikhlin, Y., cast hard alloys, B., 105.
and Sitin, M. I., metallography of tantalum, B., 65.

Zaslavski, A. I. See under Saslavski, A. J.

Zatz, R. M. See Zubkova-Gitler, S. R.

Zauscher, H., dielectric properties of electrolytically produced layers of aluminium oxide, A., 1303.

Zavalishin, A. A., processes of removal and accumulation in podsolised soils of the forest-steppe region, B., 1106.

Zavarine, I. N., quenching [of steel] in water, brine, and oil, B., 728.

Zavaritski, A. N., pseudoleucitic and epileucitic rocks, A., 60.

Zavarov, G. V., determination of potassium in catalysts for ammonia synthesis, B., 225.

Zavertnik, J., jun. See Barrett Co.

Zavizziano, (Mlle.) H., precipitation of protoactinium with titanium, A., 945.

Zavodsky, A. See Culbertson, J. B.

- Zavon, S. L. See Whiteley, J. T.
- Zawadzki, B., influence of electrolytes on the physico-chemical properties of colloidal systems comparable with cytoplasm. II. Influence of salts on the viscosity of egg-yolk solutions of different concentration, A., 647.
- Zawadzki, J., reactions in systems consisting of three phases (two solid and one gaseous), A., 312.
- and Bretsnajder, S., temperature increment of reaction velocity in reactions of type $A_{solid} + B_{solid} = C_{gas}$, A., 709.
- and Sobieraj, Z., reaction of calcium sulphate with the components of clay, B., 150.
- Zborovski, M. E. See Juschkevitch, N. F.
- Zdanov, V., energy levels of electrons in amorphous bodies, A., 282.
- Erschov, A., and Galachov, G., energy and elastic constants of some heteropolar crystals, A., 688.
- Zé, N. T., and Chao, T. L., pressure effect on photographic sensitivity, A., 712.
- and Piaw, C. S., series of caesium atoms in an electric field, A., 137. Influence of an electric field on the absorption spectra of rubidium and caesium, A., 799.
- Zea, W. J. See Holderby, J. M.
- Zebrovski, S. P., parallel employment of low- and high-frequency transformers for feeding the electrofilter, B., 957.
- Zech, R., and Pivovarsky, E., heat-resistance of iron castings, B., 593.
- Zechmeister, L., Béres, T., and Ujhelyi, E., pigmentation of the ripening gourd blossom (*Cucurbita pepo*), A., 1180.
- and Cholnoky, L. von, paprika colouring matter. VIII. Constitution of capsaanthin and capsorubin, A., 495. New pigment with lycopene spectrum, A., 983.
- and Tóth, G., effect of liquid ammonia on sugar derivatives, A., 330.
- and Tuzson, P., isolation of components of human lipochrome, A., 645. Lipochrome content of human liver, A., 1264. Lipochrome metabolism of the horse. II. Selective absorption of carotenoids in the animal body, A., 1264. Lipochromes of fats, A., 1397. Lipochromes of higher animals and of man, A., 1397. Pigments of human fat, A., 1523.
- Tuzson, P., and Ernst, E., selective accumulation of lipochrome, A., 1001.
- Zeehner, L. See Gager, R.
- Zeebnowitz, E. W., plasticity of crystals, A., 1062.
- Zeeman, P. See Gisolf, J. H.
- Zeeler, A. von, simple means of distinguishing different aluminium qualities, B., 501. Differentiation of various qualities of aluminium, B., 771.
- and Irmann, R., determination of castability of aluminium alloys, B., 232.
- See also Weber, J.
- Zeffrow, P. See Funk, C.
- Zeh, W. See Dieterle, W.
- Zehender, P. See Karrer, P.
- Zehetner, H., permeability of protoplasm to alcohols, A., 265.
- Zehnlé, P., butane vapour as an energy carrier; theory of the steam engine, B., 433.
- Zehnowitzer, E. W., plasticity of crystals of sylvine, A., 956.
- Zeidler, G., possibilities of conservation of linseed oil, especially in priming paints, B., 561.
- and Luyken, A., critical oil content of [raw] linseed oil and linseed oil-stand oil paints, B., 1004.
- See also Wolff, Hans.
- Zeile, K., humic acids, A., 1202. Creatinephosphoric acid, A., 1486.
- Zeiller, O., penetrating power of cosmic secondary radiation, A., 1297.
- Zeise, H., calculation of free energies, entropies, specific heats and equilibria from spectroscopic data and the validity of the third law. IV. Homogeneous gas equilibria calculated from spectroscopic data, A., 301. Calculation of the gaseous equilibrium $\frac{1}{2}I_2 + \frac{1}{2}Br_2 = IBr$, A., 702.
- Zeiser, H. See Schmidt, O. T.
- Zeisert, E. E. See Dietz, H. F.
- Zeissot, W. See Heide, C. von der.
- Zeissig, A. See Sumner, J. B.
- Zeitlin, W., adhesives [containing rubber], (P.), B., 163.
- Żelazna, Z. See Bekier, E.
- Zelazny, A. See Smolenski, K.
- Zeldovitch, J., mechanism of catalytic oxidation of CO on MnO_2 , A., 941. Activated adsorption, A., 1316.
- See also Roginski, S.
- Zeldovitch, P. J. See Mindlin, S. S.
- Zelenetzki, B. P., determination of zinc, A., 463.
- Zelenin, N. I. See Dobrianski, A. F.
- Zeleny, L., distribution of nitrogen in the seed of *Zea mays* at different stages of maturity, A., 1549.
- Zelikov, I. S., Kotrelev, A. N., and Fogelson, E. J., sulphur determination in mineral oils, B., 391.
- Zelinski, N. D., Denisenko, J. J., and Eventova, M. S., cyclohexadienes, A., 745.
- and Juriev, J. K., catalytic conversion of benzenes into aromatic hydrocarbons, B., 710.
- Kasanski, B. A., and Plate, A. F., hydrogenation of the simplest homologues of cyclopentane with fission of the ring and transformation into hydrocarbons of the paraffin series, A., 1357.
- and Leder-Packendorff, J., investigation of the cyclopentane hydrocarbons in naphtha-benzine by acetylation in presence of aluminium chloride, B., 836.
- Michailov, B. M., and Arbusov, J. A., thermal decomposition of cyclohexane hydrocarbons, A., 73.
- Packendorff, K., and Chochlova, E. G., preparation of gem-dimethylcyclohexane and its behaviour towards noble metal catalysts, A., 333.
- and Schujkin, N. I., catalytic aromatisation of Novo-Bogatinsk [Emba] benzine, B., 133. Aromatisation by catalysis of separate fractions of Surakhani gasoline, B., 1081.
- and Turova-Pollak, M. B., phenomena of isomerisation in the cracking of decahydronaphthalene with aluminium chloride, A., 204.
- Zelkina, S. S. See Astapenja, P. V.
- Zellhoefer, G. F., solvents for absorption-refrigeration plants, (P.), B., 1074.
- Zellmann, R. See Steingrover, F. A.
- Zellner, J., chemistry of lichens. IV. *Gyrophora dillerii* (Tuck.), Müll. Arg., and *Parmelia furfuracea*, L., A., 1432.
- See also Müller, Ernst, and Ruthner, O.
- Zelvenski, J. D. See Juschkevitch, N. F.
- Zemljanitzin, V. P., determination of copper in copper sulphate, B., 60. Reaction between calcium acetate and soda, B., 99.
- Zemplén, B. See Elias, H.
- Zemplén, G., and Csűrös, Z., action of mercury salts on acetohalogeno-sugars. X. Synthesis of derivatives of the presumed β -1-d-glucosido-2(or 3)-d-glucose, A., 200.
- and Gerecs, A., action of mercury salts on acetohalogeno-sugars. IX. Synthesis of derivatives of β -1-l-rhamnosido-6-d-glucose, A., 200. Constitution and synthesis of rutinose, the biose of rutin, A., 1109.
- Zener, C., spectral selective photo-electric effect, A., 273. Diffuse scattering of X-rays by conduction electrons, A., 1438.
- See also Mott, N. F.
- Zenghélis, C., and Evangelidès, S., action of an electric discharge on nitric oxide; production of active nitrogen, A., 176.
- Zerban, F. W., lead volume error in the polarisation of raw sugars, B., 75. Polarisation of raw cane sugars, using wet and dry clarification, B., 202.
- Hughes, W. J., and Wiley, M. H., comparison of official reducing-sugar methods in analysis of raw cane sugars, B., 518.
- Sattler, L., and Lorge, I., turbidity in sugar products. III. Transmittancy and Tyndall-beam intensity of solutions of raw cane sugars, B., 648.
- Zerbe, C., and Folkens, K., aromatic constituents of mineral lubricating oils. I and II, B., 615, 710.
- and Jago, F., synthesis of phenol ethers by means of carbon monoxide, B., 442.
- Zerevitinov, S. F., and Metlitzki, L. F., influence of high-frequency electric fields on keeping qualities of fruits and vegetables, B., 1020.
- Zerfas, L. G. See Helmer, O. M.
- Zerling, M. R. See Tinel, J., and Ungar, G.
- Zeromski, S., and Slubicki, Z., system $CaSO_4$ -CaO- SO_2 , A., 303.
- Zerr, G., pigment or "adulterated pigment" for oil enamel manufacture, B., 417.
- Zerrweck, W. See Brigl, P.
- Zertschaninova, T. K. See Oschman, V. A.
- Zervas, L. See Bergmann, M.
- Zetterberg, J. M. See Alway, F. J.
- Zettergren, B. See Toruli, H. G.
- Zetzmann, H. J., temperature measurement with photo-electric cells, A., 1474.
- Zeumer, H., and Roth, W. A., heats of formation and solution of hydrogen sulphide, A., 36. Heats of formation of certain sulphides, A., 1078. Heat of formation of zinc sulphide; comments on the sodium peroxide method of Mixer, A., 1324. Heats of formation and solution of potassium dithionate, A., 1324.
- Zgleczewski, J. See Marchlewski, L.
- Zhdanov, See under Shdanov.
- Zhemchuzhnikov, Y. A., petrographic characteristic of Irkutsk sapropel coals, A., 61.
- Zherebov, L. P., and Kovalenko, A. G., fireproofing fibrous material, B., 806.
- and Plunganskaja, M. N., sodium acetate and kraft pulp from timber-fell waste, B., 221.
- Subkova-Gitler, S. R., Zalmonzon, R. S., and Yukina, L. N., alcohols from wood waste, B., 249.

- Zhivotovski, A. G., inversion of sodium nitrite with nitrogen oxides, A., 452.
- Zia, L. S., and Forkner, C. E., acute agranulocytosis of kala-azar: negative effect of urea-stibannine and neostibosan on blood of normal rabbits, A., 776.
- Ziegelmayr, W., pectin-phenomenon of blood and its physico-chemical basis, A., 879. Effect of pectin on change of state of milk and its main products, particularly on the digestibility of cheese, B., 426.
- Ziegler, A. See Norton, J. T.
- Ziegler, E. E., new measurement of "oxygen-absorbing power," A., 640.
- Ziegler, F. K., and Bowland, D. W., X-ray inspection of high-alloy castings, B., 153.
- Ziegler, G. E., crystal structure of lithium sulphate monohydrate, A., 285.
- Ziegler, K., reactions involving ring closure, A., 84. Solutions or suspensions of organic substituted alkali metal amides, (P.), B., 796.
- Ziegler-Wellmann, M., microbalance to weigh to 10^{-6} g., A., 189.
- Zielinski, G., polarisation of the fluorescence bands 2540 and 2650 Å. of mercury vapour, A., 800.
- Ziembra, J. See Rudolfs, W.
- Ziemecki, S., rock-salt absorption of cosmic rays, A., 8.
- Ziener, dry purification of mercury, A., 944.
- Ziener, T., water-jet pumps, B., 82. Protective measures against risks arising from mercury in laboratory apparatus, B., 479. Strength of glass, B., 1142.
- Ziese, W., specificity of amylases. I. Action of amylases on starch hydroxyethyl ether. II. Degradation of the hydroxyethyl ether of potato-starch to non-reducing substances, A., 401, 1415.
- See also Klein, G.
- Zietan, K. See Rojahn, C. A.
- Zijderveld, G. J. van. See under Synd. "Jozijdhoff."
- Zijp, C. van, ammonium molybdate as a microchemical reagent, A., 720.
- Zilberg, I. G., chromate oxidation of o-toluenesulphonamide, A., 995. [Preparation of] dichloramine-B, B., 832.
- Zilberman, G. V. See Voroshechov, N. N.
- Zilberman, M. S. See Fortinski, B. F.
- Zilva, S. S., ascorbic acid content of the intestine of the guinea-pig, A., 262. Behaviour of L-ascorbic acid and chemically related compounds in the animal body; anti-scorbutic activity in relation to retention by the organism, A., 1036. Behaviour of D-ascorbic acid and chemically related compounds in the animal body; influence of generalised ether anaesthesia on their urinary excretion, A., 1429.
- See also Kellie, A. E.
- Zimakov, P. V., primary molecular interaction in chemical kinetics, A., 1326.
- Zimmerli, A., alkylated derivatives of amines, (P.), B., 1131.
- See also Du Pont de Nemours & Co., E. I.
- Zimmerman, E. W., iron gallate inks—liquid and powder, B., 913.
- Weber, C. G., and Kimberly, A. E., relation of ink to the preservation of written records, B., 774.
- Zimmerman, J. C., formation of active materials for alkaline storage cells, B., 1099.
- Zimmerman, L. See Frank, R.
- Zimmermann, E., and Kluge, H., detection of soya flour, B., 570.
- Zimmermann, G., diffusion theory of the normal zero gradient of inert gases, A., 9.
- Zimmermann, H. See Trautz, M.
- Zimmermann, M. H., and Firestone Tire & Rubber Co., accelerator for vulcanisation of rubber, (P.), B., 322.
- See also Dunbrook, R. F.
- Zimmermann, O. See Fürth, R.
- Zimmermann, P. See Brassert, H. A.
- Zimmermann, P. W., anasthetic properties of carbon monoxide and other gases in relation to plants, insects, and centipedes, A., 1160.
- and Connard, M. H., reversal of direction of translocation of solutes in stems, A., 266.
- and Crocker, W., toxicity [to plants] of air containing sulphur dioxide gas, B., 200.
- and Wilcoxon, F., several chemical growth-substances which cause initiation of roots and other responses in plants, A., 1548.
- See also Crocker, W.
- Zimmermann, W., protein problem. II. Detection of the free amino-group of terminal glycine, A., 638. Colour reaction of the sex hormones and its application to colorimetric determination, A., 1032.
- and Baumann, A., catabolism of fat and phosphatides in germinating soya beans, A., 795.
- McPhail, M. K., and Canzanelli, A., protein problem. III. Methylation and enzymic fission of gelatin, A., 638.
- See also Ruzicka, L.
- Zimmerschied, W., adsorption of atmospheric ions by active charcoal, A., 1200.
- Zimmet, D. See Battelli, F.
- Zinn, C. J., where did spring nitrates go? B., 38.
- Zinn, R. E., and Victor Chemical Works, [composition for] water softener, (P.), B., 788.
- Zinnitz, F. See Gremels, H.
- Zinnwerke Wilhelmsburg G.m.b.H., and Leipelt, K., separation of metals by vacuum distillation, (P.), B., 504.
- Zinser, W. See Balz, G.
- Zinsser & Co., Inc. See Gessler, A. E.
- Zinszer, R. H., near ultra-violet spectrum of copper produced by the hot spark *in vacuo*, A., 1291.
- Zintl, E., and Brauer, G., constitution of lithium nitride, A., 433. Metals and alloys. XIV. Constitution of lithium-bismuth alloys, A., 692.
- and Harder, A., constitution of the alkaline-earth hydrides, A., 285. Lattice dimensions of lithium hydride and lithium deuteride, A., 812. Metals and alloys. XVI. Structure of platinum-thallium alloys, A., 1455.
- Morawietz, M., and Woltersdorf, G., ortho-salts of oxy-acids, A., 591.
- and Schneider, A., metals and alloys. XIII. Constitution of lithium-cadmium alloys. XV. X-Ray analysis of lithium-zinc alloys. XVII. X-Ray analysis of lithium amalgams, A., 692, 1455.
- Zinzadze, C., colorimetric determination of arsenic in phosphorus-free solutions, A., 1092. Colorimetric determination of phosphorus in presence of silica, arsenic, iron, and nitrates, A., 1092. Photoelectric photometers for use in colorimetry, A., 1097.
- Zinzow, W. A., and Hazen, T., electrical properties of certain bakelite materials, B., 957.
- Zipf, K., and Rathert, K., effect of liver extract on fermentation by yeast, A., 253.
- Zipprich, B., investigation of atomic disintegration by means of a double ionisation chamber, A., 803.
- Zirkler, J., studies with thorium-C'', A., 425.
- Ziska, A., and Smith Corp., A. O., heat-exchange apparatus, (P.), B., 83.
- Zitti, R. See Juillet, A.
- Zittle, C. A., and Schmidt, C. L. A., heats of solution, heats of dilution, and specific heats of aqueous solutions of certain amino-acids, A., 304.
- Zivadinovic, R. See Pushin, N.
- Zivchinski, A. F. See Barbaumov, N. I.
- Zivotinsky, P. B. See Stender, W. W.
- Zizine, P. See Lesné, E.
- Zlabek, Z. See Bergauer, V.
- Zlataroff, A., influence of chemical stimulants on growth of plants, A., 418.
- Zlobin, V. N. See Kireev, V. A.
- Zlotnik, A. See Smoleński, K.
- Zlotowski, I., researches on cathodic polarisation of metal electrodes by means of Heyrovsky and Shikata's polarograph. I. Cathodic polarisation of solid metal electrodes. II. Overpotential phenomenon appearing in electrodeposition of metallic ions. III. Theory of overpotential of hydrogen, A., 171. Passage of the current at potentials below the decomposition potential of electrolytes, A., 585.
- See also Swientoslawski, W.
- Zmaczyński, A., coulometric and tonometric studies of chemically pure liquids, A., 289.
- See also Swientoslawski, W.
- Zobell, C. E., and Feltham, C. B., occurrence and activity of urea-splitting bacteria in the sea, A., 664.
- Zoboli, C. See Kallós, P., and Schaefer, W.
- Zocher, H. See Saechting, H.
- Zoellner, E. A. See Gilman, H.
- Zörkendörfer, W., excretion and determination of thiosulphate in urine, A., 1006.
- Zollinger, R., grinding of cement clinker, B., 61.
- Zolotov, N. N. See Frost, A. V.
- Zombory, L. von, natural mineral gel from Vashegy, A., 1479.
- Zon, (Miss) P. M. van. See Nieuwenburg, C. J. van.
- Zondek, B., destruction of folliculin in the animal body, A., 1173.
- See also Euler, H. von.
- Zonis, S. See Salkind, J.
- Zonnenberg, G. J. O., causes of explosions of solids, B., 879.
- Zorin, E. N., Mexican tomatoes as an anti-scorbutic remedy, A., 546.
- Zorkin, F. P., determination of bromide ion in presence of large quantities of chloride ion, A., 183.
- Zorn, W. M., Egger, W. F., and Low Temp. Processing Co., treatment of material, (P.), B., 1076.
- Zorzi, D., modifications of blood-sugar and liver-glycogen in splenectomised animals, A., 243.
- Zosimovitch, D. P. See Plótnikov, V. A.
- Zotos, G., cracking of oils, (P.), B., 936.
- Zottoli, A. M., acoustic coating material, (P.), B., 1144.

- Zouckermann, *R.*, sparking potential of hydrogen at high frequencies, *A.*, 1438.
- Zoutendyk, *A.* See Grasset, *E.*
- Zozaya, *J.*, physico-chemical study of blood-sera, *A.*, 1262.
- Zrike, *E.*, and Lindwall, *H. G.*, synthesis of β -naphthoxindole derivatives, *A.*, 501.
- Zsehacke, *F. H.*, differentiation of sheet glasses according to method of production and subsequent grinding and polishing, *B.*, 674.
- Zscheile, *F. P., jun.*, fluorescence spectra of chlorophyll-*a* and -*b* in ether solution, *A.*, 905.
- See also Miller, *E. S.*
- Zschimmer, *E.* See Wiegand, *H.*
- Zubairy, *A. W.* See Samuel, *R.*
- Zubkova-Gitler, *S. R.*, and Zatz, *R. M.*, preparation of citric acid from wood-pulp hydrolysates, *B.*, 1160.
- Zueker, *M.* See Moore, *O. G.*
- Zuckerman, *S.* See Parkes, *A. S.*
- Zürcher, *H.* See Fierz-David, *H. E.*
- Zürrer, *T.*, and Treadwell, *W. D.*, purification of electrode carbons for spectral analysis, *A.*, 1340.
- Zürupa, *N.* See Peskov, *N.*
- Zummo, *C.*, nitrogen metabolism. II. Effect of an alkalising salt, sodium citrate, on endogenous nitrogen metabolism on a fat diet. IV., *A.*, 891.
- and Scozzari, *G.*, effect of excitometabolic substances on the alkaline reserve and p_{H} of the blood, *A.*, 530.
- See also Lombroso, *U.*
- Zumstein, *R. V.* See Knauss, *H. P.*
- Zunker, *F.*, surface pressure, sorption, and resistance to wetting [of soils], *B.*, 819.
- Zunker, *P.*, density of electrolytic zinc containing copper and the effect thereon of hot- and cold-rolling, *B.*, 362.
- Zunz, *E.*, and La Barre, *J.*, origin of the hypoglycemia provoked by the thyrotropic hormone of the anterior pituitary, *A.*, 541. Action of the thyrotropic substance of anterior pituitary origin on the thyroxine content of the blood, *A.*, 790. Action of the pancreatic hormone of anterior pituitary origin on blood-sugar, *A.*, 1172. Effect of cortin on adrenaline secretion, *A.*, 1543.
- and Perla, *J.*, action of piperidinomethyl-3-benzodioxan on glycaemia in the dog, *A.*, 117.
- and Vesselovski, *O.*, action of germanin on diuresis, *A.*, 781.
- Zupancic, *P. R.*, exhalation of radon from the soil, *A.*, 191.
- Zuralev, *S.* See Kubelka, *V.*
- Zurich, *L. G.* See Klebanski, *A. L.*
- Zuverkalov, *D.*, influence of character of diet on oxidation of benzaldehyde in the rabbit, *A.*, 1530.
- See also Epelbaum, *S.*
- Zuydewijn, *E. de R. van.* See Böeseken, *J.*
- Zvenigorodskaja, *V. M.*, separation of manganese on the mercury cathode, *A.*, 597.
- Zverev, *L. V.* See Schmanenkov, *I. V.*
- Zvetkov, *V.* See Fréderiks, *V.*
- Zvilichovskaja, *E. J.* See Solotareva, *N. P.*
- Žvironas, *A.*, Zeeman effect of the hyperfine structure of the Hg line 2536, *A.*, 3. Anomalous Zeeman effect of single hyperfine structure components of the mercury resonance line 2537 Å. I. The π components, *A.*, 3.
- Zvjagintzev, *O. E.*, new mineral containing metals of platinum group, *A.*, 190.
- and Brunovski, *B. K.*, rhodium-copper alloys, *A.*, 440. Osmiridium. III. X-Ray analysis, *A.*, 440.
- Zvjagintzev, *O. E.*, and Filippov, *A. N.*, occurrence of platinum in sulphide ores, *A.*, 602. Platinum content of sulphide minerals, *A.*, 602.
- Zvorikina, *V. K.* See Nametkin, *S. S.*
- Zvorykin, *A. J.*, decomposition of barium sulphate by chlorine, *B.*, 1141.
- Zwarenstein, *H.*, endocrine glands and calcium metabolism, *A.*, 258.
- See also Shapiro, *H. A.*
- Zwecker, *O.*, steric hindrance, a means of analysis of intermolecular forces, *A.*, 1112.
- Zweibaum, *J.*, and Szejnman, *M.*, binuclear cells in tissue cultures, *A.*, 1012.
- Zwemer, *R. L.*, adrenal cortex and electrolyte metabolism, *A.*, 237.
- and Sullivan, *R. C.*, blood chemistry of adrenal insufficiency in cats, *A.*, 237. Cortico-adrenal influence on blood-sugar mobilisation, *A.*, 789.
- See also Agate, *F. J., jun.*, Jungeblut, *C. W.*, and Wotton, *R. M.*
- Zwergal, *A.*, determination of paraffin in asphaltic mineral oils by distillation under high vacuum, *B.*, 886.
- See also Heinze, *R.*
- Zwick, *F.* See under Schachtelkäsefabr. *F. Zwick.*
- Zwicky, *F.*, plasticity of crystals, *A.*, 19.
- Zwicky, *J.*, filter, (P.), *B.*, 434.
- Zwieg, *W.*, and Kossendey, *F.*, apparatus for determination of naphthalene in gases, *B.*, 341. Apparatus for determination of naphthalene in motor benzol, *B.*, 885.
- Zwikker, *N. P.* See Loman, *R.*
- Zwilmeyer, *F.* See Du Pont de Nemours & Co., *E. I.*, and Nat. Aniline & Chem. Co.
- Zwoyer, *E. B. A.*, Stillman, *A. L.*, and Gen. Fuel Briquette Corp., carbonisation of coal briquettes, (P.), *B.*, 134.
- Żyw, *M.* See Danysz, *M.*, and Hersz-finkel, *H.*